Price 1/6.

Geological Series
Bulletin No. 15

UNION OF SOUTH AFRICA

DEPARTMENT OF MINES

WATERBERG COALFIELD

RECORDS OF BOREHOLES 1 to 20

SUNK FOR

THE DEPARTMENT OF MINES

With notes by F. A. Venter, M.Sc.

Publication of the Geological Survey Division

Prys 1/6.

Geologiese Serie
Bulletin No. 15

UNIE VAN SUID-AFRIKA

DEPARTEMENT VAN MYNWESE

WATERBERG-STEENKOOLVELD

BOORGATSTATE VAN GATE 1 tot 20

GEBOOR VIR

DIE DEPARTEMENT VAN MYNWESE

Met aantekeninge deur F. A. Venter, M.Sc.

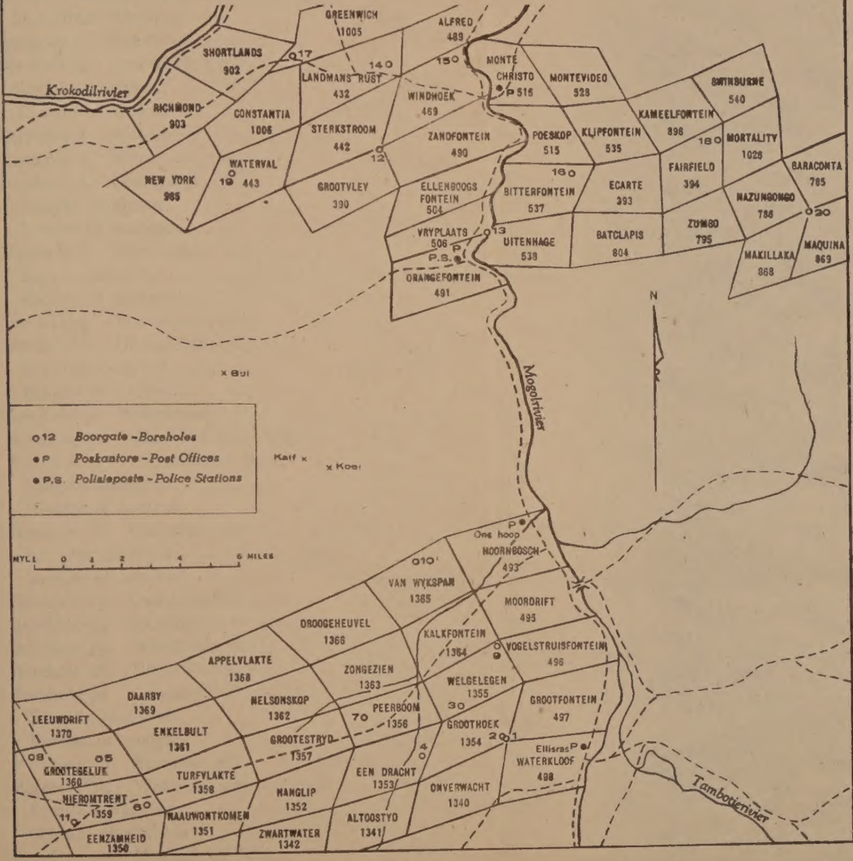
Publikasie van die afdeling Geologiese Opname

Printed in the Union of South Africa by the Government Printer, Pretoria
Gedruk in die Unie van Suid-Afrika deur die Staatsdrukker, Pretoria

G.P.-S.5352—1944-5—1,500.

MAP TO INDICATE THE FARMS AND SITES OF BOREHOLES IN THE WATERBERG COAL AREA

KAART WAT DIE PLASE EN POSISIES VAN BOORGATE AANTOON IN DIE WATERBERG-STEENKOOLGEBIED



CONTENTS.

PAGE

A. INTRODUCTORY NOTE.................................... 3
B. GENERAL GEOLOGY.. 5
C. ANALYTICAL METHODS AND THEIR SIGNIFICANCE......... 7
D. THE BOREHOLE RECORDS................................. 11
  Broehole 1. Groothoek 1354........................ 11
  Borehole 2. Groothoek 1354........................ 13
    Samples analysed................................. 15
    Results of analysis.............................. 16
  Borehole 3. Welgelegen 1355....................... 17
  Borehole 4. Eendracht 1353........................ 18
  Borehole 5. Grootgeluk 1360....................... 22
    Samples analysed................................. 26
    Results of analysis.............................. 33
  Borehole 6. Hieromtrent 1359...................... 35
    Samples analysed................................. 39
    Results of analysis.............................. 47
  Borehole 7. Peerboom 1356......................... 49
  Borehole 8. Grootgeluk 1360....................... 51
    Samples analysed................................. 54
    Results of analysis.............................. 57
  Borehole 9. Welgelegen 1355....................... 59
  Borehole 10. Van Wykspan 1365..................... 61
  Borehole 11. Hieromtrent 1359..................... 63
    Samples analysed................................. 65
    Results of analysis.............................. 68
  Borehole 12. Grootvlei 390........................ 69
    Samples analysed................................. 75
    Results of analysis.............................. 80
  Borehole 13. Oranjefontein 491.................... 82
  Borehole 14. Landmansrust 432..................... 87
  Borehole 15. Windhoek 469......................... 88
  Borehole 16. Bitterfontein 537.................... 89
  Borehole 17. Greenwich 1005....................... 91
    Samples analysed................................. 94
    Results of analysis.............................. 95
  Borehole 18. Fairfield 394........................ 96
  Borehole 19. Waterval 443......................... 98
    Samples analysed................................. 100
    Results of analysis.............................. 103
  Borehole 20. Makkillaka 868....................... 104

INHOUD.

BLADSY

A. Inleiding 4
B. Algemene Geologie 4
C. Ontledingsmetodes en hul betekenis 8
D. Die Boorgatstate 11
Boorgat 1. Groothoek 1354 11
Boorgat 2. Groothoek 1354 13
Monsters ontleed 15
Resultate van analises 16
Boorgat 3. Welgelegen 1355 17
Boorgat 4. Eendracht 1353 18
Boorgat 5. Grootgeluk 1360 22
Monsters ontleed 26
Resultate van analises 33
Boorgat 6. Hieromtrent 1359 35
Monsters ontleed 39
Resultate van analises 47
Boorgat 7. Peerboom 1356 49
Boorgat 8. Grootgeluk 1360 51
Monsters ontleed 54
Resultate van analises 57
Boorgat 9. Welgelegen 1355 59
Boorgat 10. Van Wykspan 1365 61
Boorgat 11. Hieromtrent 1359 63
Monsters ontleed 65
Resultate van analises 68
Boorgat 12. Grootvlei 390 69
Monsters ontleed 75
Resultate van analises 80
Boorgat 13. Oranjefontein 491 82
Boorgat 14. Landmansrust 432 87
Boorgat 15. Windhoek 469 88
Boorgat 16. Bitterfontein 537 89
Boorgat 17. Greenwich 1005 91
Monsters ontleed 94
Resultate van analises 95
Boorgat 18. Fairfield 394 96
Boorgat 19. Waterval 443 98
Monsters ontleed 100
Resultate van analises 103
Boorgat 20. Makkillaka 868 104

THE WATERBERG COALFIELD

A. INTRODUCTORY NOTE

The Waterberg Coalfield is situated in the western part of the Waterberg District and it adjoins the Bechuanaland Protectorate in the west where the Crocodile river is the boundary between that territory and the Transvaal. In contrast to the mountainous nature of the country to the south, occupied by the sandstones, quartzites and conglomerates of the Waterberg system, the low country is a more or less featureless, bush-covered plain that lies about 3,000 feet above sea-level. The only prominent landmarks are Nelsonskop, The Bull, The Cow and the Calf. They are erosional relicts of the Cave sandstone that rise from 50 to 150 feet above the level of the surrounding plain. The Mogol and the Palala rivers flow through the central and eastern parts of the areas respectively. These streams are tributaries of the Crocodile river and flow in a northerly direction.

Coal was first discovered in boring for water on the farm Grootgeluk 1360 in 1920. A few more boreholes in this vicinity were put down and the coal cores were analysed. The results of this drilling are recorded by Trevor and du Toit in the South African Journal of Industries, April, 1922*. Between 1920 and 1940 no further drilling for coal was undertaken.

During 1941 a beginning was made with the geological survey of this area in order to determine the size of the coalfield, the number of coal seams present and the nature of the coal. As there are no natural exposures of the coal seams drilling had to be resorted to in order to obtain the necessary data. So, concurrently with the Geological Survey, drilling was done by the Irrigation Department with two machines on sites specially selected by the Geological Survey, in order to obtain the most information regarding the coal seams and the associated rocks. Both machines are of the rotary type, the smaller one producing a core of ⅞ inches and the larger 3⅜ inches in diameter respectively. The cores are carefully examined and recorded by the geologists in the field. The coal cores of the large machine only are forwarded to the Fuel Research Institute at Pretoria for the analysis and testing of the different properties of the coal. The borehole records and analyses, tabulated in this report, are the results so far obtained from the first twenty holes, and the primary object of this bulletin is to make the results known.

---

* See also Geological Survey Memoir No. 19, Vol. III.

DIE WATERBERGSE STEENKOOLVELD

A. INLEIDING

Die Waterbergse steenkoolveld is in die westelike gedeelte van die Waterbergdistrik geleë. In die weste grens dit aan die Protektoraat Betsjoeanaland waar die Krokodilrivier die grenslyn tussen daardie gebied en die Transvaal vorm. In teëstelling met die bergagtige aard van die landstreek na die suide, wat die sandsteen, kwartsiet en die konglomerate van die Waterbergsisteem beslaan, is die laeveld 'n bosbedekte vlakte, bykans sonder uitstaande kenmerke, en omtrent 3,000 vt. bo die seespieël geleë. Die enigste opvallende bekende punte van die landskap is Nelsonskop, die Bul, die Koei, en die Kalf. Hulle is erosierelikte van Holkrans-sandsteen wat van 50 tot 150 vt. bo die omliggende vlakte uitsteek. Die Mogol- en die Palala-rivier vloei onderskeidelik deur die sentrale en die oostelike gedeeltes van die gebied. Hierdie riviere is sytakke van die Krokodilrivier en vloei in 'n noordelike rigting.

Steenkool is eers ontdek terwyl na water geboor is op die plaas Grootgeluk 1360 in 1920. Enkele verdere boorgate is in hierdie omgewing geboor en die steenkoolkerns is ontleed. Die resultate van hierdie boordery word deur Trevor en du Toit in die *South African Journal of Industries*, April 1922,* aangegee. Tussen 1920 en 1940 is daar nie verder na steenkool geboor nie.

Gedurende 1941 is 'n begin gemaak met die geologiese opname van hierdie gebied ten einde die omvang van die steenkoolveld, die aantal steenkoollae aanwesig en die aard van die steenkool vas te stel. Aangesien daar geen natuurlike blootleggings van die steenkoollae is nie, moes die nodige gegewens verkry word deur gate te boor. So is daar, in samewerking met die Geologiese Opname, deur die Besproeiingsdepartement met twee boormasjiene gate geboor op plekke spesiaal deur die Geologiese Opname aangewys, ten einde die meeste inligting betreffende die steenkoollae en die geassosieerde gesteentes te verkry. Albei die boormasjiene is van die rotasietipe waarvan die een 'n kern van ⅞ dm. deursnee en die ander 'n kern van 3⅜ dm. deursnee, oplewer. Die geoloë ondersoek die kerns noukeurig en teken hul waarnemings sorgvuldig aan in die veld. Slegs die kerns deur die grootste boormasjien verkry, word aan die Brandstofnavorsingsinstituut in Pretoria deurgestuur om ontleed en getoets te word ten einde die verskillende eienskappe van die steenkool vas te stel. Die boorgatstate en analises wat in hierdie verslag getabelleer is, is die resultate tot dusver uit die eerste twintig boorgate verkry en met hierdie bulletin word hoofsaaklik beoog om die resultate bekend te maak.

B. ALGEMENE GEOLOGIE

In hierdie gelyk wêreld is die afwateringsisteem baie swak ontwikkel. As gevolg is die grootste gedeelte van die veld met sand bedek wat hoofsaaklik van gesteentes van die Karoo-sisteem

---

* Sien ook *Geological Survey Memoir* No. 19, Vol. III.

B. GENERAL GEOLOGY

In this flat country the drainage system is very poorly developed. The result is that the major portion of the field is covered by sand derived mainly from rocks of the Karroo system. In other portions surface limestone and recent conglomerates and grits also play a part in covering up the underlying Karroo and older formations. Outcrops are therefore very scanty and are mainly confined to the larger watercourses with the result that accurate geological boundaries between the various members of the Karroo system and between rocks belonging to the latter and the older rocks, cannot be drawn.

The Karroo sediments on the whole occur in the form of a wide shallow syncline with an axis trending east to west. A few east-west faults have so far been located. Some of them have a down-throw towards the south and others towards the north. Their structural effect on the strata has not yet been determined. In the southern part of the coalfield the Karroo sediments were deposited on a floor of rocks belonging to the Waterberg system. In the east the floor consists partly of basic rocks and Red granite belonging to the Bushveld igneous complex. Over the greater part of the area, however, the Karroo rocks rest on Older-Granite and rocks belonging to the Swaziland system.

From observations in the field but mainly from the results of drilling, the following succession of Karroo rocks in this coalfield has been established and tentatively classified :—

	Thickness	*Series*	*Representative Rocks*
(1)	± 300 ft.	*Cave Sandstone*	Fine-grained white and reddish sandstone.
(2)	± 300 ft.	*Red Beds* ?	Very fine-grained clayey sandstones and red mudstones.
(3)	35 to 70	*Molteno Beds* ?	Coarse-grained white and purple or brown sandstone containing scattered pebbles.
(4)	65 to 310 ft.	*Beaufort Beds* ?	Red and drab-coloured mudstones.
(5)	60 to 280 ft.	*Upper Ecca*. . .	A succession of intercalated carbonaceous shale bands and coal seams. The coal is generally bright.
(6)	225 ft. . .	*Middle Ecca*. . .	Feldspathic sandstone and grit, with intercalated carbonaceous shale and sandy shale The latter carries a few coal seams in the upper portion and one or more sporadically developed coal seams in the bottom portion.
(7)	540 ft. . .	*Lower Ecca*. . . .	Clayey and sandy shales with sandstone and grit in the lower portion.

afkomstig is. In ander gedeeltes het oppervlakte-kalksteen en resente konglomerate en grintsteen ook 'n aandeel in die bedekking van die benedeliggende Karoo- en ouer formasies. Dagsome is dus baie skaars en word hoofsaaklik beperk tot die groter riviere, met die gevolg dat juiste geologiese grense tussen die verskillende lede van die Karoo-sisteem en die latere en die ouere gesteentes nie afgebaken kan word nie.

Oor die algemeen kom die Karoo-sedimente voor in die vorm van 'n wye vlak sinkline waarvan die as van oos na wes strek. Tot dusver is die ligging van enkele verskuiwings wat van oos na wes strek, bepaal. Sommige van hulle het 'n suidwaartse val en ander 'n noordwaartse. Hul uitwerking op die laagstruktuur is nog nie vasgestel nie. In die suidelike gedeelte van die steenkoolveld is die Karoo-sedimente op 'n vloer van gesteentes wat tot die Waterberg-sisteem behoort, afgesit. In die ooste bestaan die vloer deels uit basiese gesteentes en Rooigraniet wat tot die Bosveld-stollingskompleks behoort. Die Karoo-gesteentes rus egter oor die grootste gedeelte van die gebied op Ouer-graniet en gesteentes van die Swaziland-sisteem. Die volgende suksessie van Karoo-gesteentes in hierdie steenkoolveld is vasgestel en tentatief geklassifiseer en wel deels uit waarnemings in die veld maar hoofsaaklik volgens die boorresultate :—

	Dikte	*Serie*	*Verteenwoordigende Gesteente*
(1)	± 300 vt.	*Holkrans-sandsteen*	Fynkorrelrige wit en rooierige sandsteen.
(2)	± 300 vt.	*Rooi-lae* ?.	Baie fynkorrelrige kleiige sandsteen en rooi moddersteen.
(3)	35 tot 70 vt.	*Molteno-lae* ?. .	Grofkorrelrige wit en pers of bruin sandsteen wat verspreide spoelklippers bevat.
(4)	65 tot 310 vt.	*Beaufort-lae* ?..	Rooi- en vaalkleurige moddersteen.
(5)	60 tot 280 vt.	*Bo-Ecca*.	'n Suksessie tussengelaagde koolstofhoudende skaliebande en steenkoollae. Die steenkool is gewoonlik glansend.
(6)	225 vt. . .	*Middel-Ecca* . .	Veldspatiese sandsteen en grintsteen, met tussengelaagde koolstofhoudende skalie en sanderige skalie. Laasgenoemde bevat 'n paar steenkoollae in die boonste gedeelte en een of twee sporadies ontwikkelde steenkoollae in die onderste gedeelte.
(7)	540 vt. . .	*Onder-Ecca*. . . .	Kleiige en sanderige skalie met sandsteen en grintsteen in die onderste gedeelte.

Up to the present no Dwyka conglomerate has been found in any one of the boreholes.

In connection with the above subdivision of the Karroo system, it must be mentioned that, whereas the identity of the Cave sandstone has been established with certainty, that of the Red beds the Molteno beds and Beaufort beds is uncertain and has here been adopted merely for the sake of convenience. No index fossils have so far been discovered and the subdivision is based purely on lithological grounds. It is therefore possible that this tentative classification may in future be revised with the progress of the survey and drilling operations.

The following are the records of the first twenty boreholes put down in this coalfield and the accompanying sketch map shows their positions. Most of the above information has been compiled from notes made by Mr. J. F. Cillie and Mr. H. N. Visser geologists of this Division, who are responsible for the geological survey of this field and the recording of the borehole cores. The Fuel Research Institute of South Africa determined the chemical properties of the various coal seams.

C. ANALYTICAL METHODS AND THEIR SIGNIFICANCE *

(*a*) *Sampling*

Sampling is carried out according to South African Standard Specification, S.A. No. 13 of 1937, " Standard Methods for the Sampling of Coal in South Africa ". (**N.S. :** Not sampled.)

(*b*) *Proximate Analyses*

(i) *Moisture Content.*—This is determined as the loss of weight on heating 1 gram of coal at 101–105° C. for one hour.

(ii) *Ash Content.*—The residual ash obtained on combustion of 1 gram of coal. The coal is slowly heated to 800° C. and kept at this temperature for one hour.

(iii) *Volatile Matter Content.*—The loss of weight of 1 gram of coal heated at 920° for 7 minutes minus the weight of water present in the coal.

(iv) *Fixed Carbon Content.*—This is obtained by subtracting the sum of moisture, ash and volatile matter contents from 100.

(*c*) *Calorific Value* (*Cal. Val.*)

This value, expressed in Evaporative Units (lbs./lb.), is calculated from the rise in temperature obtained from the combustion of 1 gram of coal under 30 atmospheres pressure of oxygen in a Berthelot-Mahler-Kroeker bomb calorimeter.

The determination is carried out according to South African Standard specification, S.A. No. 5 of 1940, " The Determination of the Comparative Calorific Values of Coals in South Africa (1 lb./lb. unit = 970 B. Th. U's/lb.)

---

* Contributed by the Fuel Research Institute of South Africa.

Tot dusver is in geeneen van die boorgate enige Dwyka-konglomeraat aangetref nie.

In verband met bostaande indeling van die Karoo-sisteem moet daarop gewys word dat, terwyl die identiteit van die Holkrans-sandsteen met sekerheid vasgestel is, dié van die Rooi-, Molteno- en die Beaufort-lae onseker is, en hier slegs gerieflikheidshalwe aanvaar is. Tot dusver is geen gidsfossiele ontdek nie en die indeling is bloot op litologiese gegewens gegrond. Dit is dus moontlik dat hierdie tentatiewe groepering in die toekoms na gelang die opsporings- en boorwerksaamhede vorder, gewysig kan word.

Hierop volg nou die state van die eerste twintig boorgate wat in hierdie steenkoolveld geboor is en die meegaande sketskaart toon hul posisies aan. Bostaande inligting is merendeels saamgestel uit aantekeninge van mnre. J. F. Cillie en H. N. Visser, geoloë aan hierdie afdeling verbonde, wat verantwoordelik gestel is vir die geologiese opmeting van hierdie veld en die aanteken van die besonderhede van die boorgatkerns. Die Suid-Afrikaanse Brandstofnavorsingsinstituut het die chemiese eienskappe van die verskillende steenkoollae bepaal.

C. ONTLEDINGSMETODES EN HUL BETEKENIS*

(*a*) *Monstering*

Monstering word volgens Suid-Afrikaanse Standaardspesifikasie, No. 13 van 1937, ,, Standard Methods for the Sampling of Coal in South Africa ", uitgevoer. (**N.G. :** Nie gemonster nie).

(*b*) *Kortanalises*

(i) *Voggehalte.*—Dit word vasgestel as die verlies aan gewig by die verhitting van 1 gram steenkool by 101–105° C. vir een uur.

(ii) *Asgehalte.*—Is die oorblywende as wat by verbranding van 1 gram steenkool verkry word. Die steenkool word langsaam verhit tot 800° C. en word een uur lank by hierdie temperatuur gehou.

(iii) *Gehalte aan Vlugtige Bestanddele.*—Die verlies aan gewig van 1 gram steenkool wat 7 minute lank by 920° verhit is, min die gewig aan water wat in die steenkool aanwesig is.

(iv) *Gehalte aan Kooks-koolstof.*—Dit word verkry deur die som van die gehalte aan vog, as en vlugtige bestanddele van 100 af te trek.

(*c*) *Verhittingswaarde* (*Vw.*)

Hierdie waarde wat in verdampingseenhede (℔./℔.) opgegee word, word bereken uit die temperatuurstyging wat behaal word deur die verbranding van 1 gram steenkool onder 'n suurstofdruk van 30 atmosfere in 'n Berthelot-Mahler-Kroeker-bomkalorimeter.

Die bepaling word uitgevoer volgens Suid-Afrikaanse Standaardspesifikasie, S.A. No. 5 van 1940, ,, The Determination of the Comparative Calorific Values of Coals in South Africa ". (1 ℔./℔.-eenheid=970 B.Th.U.'s. ℔.)

---

* Bygedra deur die Suid-Afrikaanse Brandstofnavorsingsinstituut.

(*d*) *Preliminary Float* (*Fl.*) *and Sink Analysis*

Twenty gram portions of the coal are separated into different specific gravity fractions in a centrifuge using petrol and carbon tetrachloride mixtures of varying specific gravity. The apparatus and method used is described in the Journal of the Chemical, Metallurgical and Mining Society of South Africa, Vol. 34, No. 8: "A Specific Gravity Investigation of Coal Samples", by P.E. Hall.

(i) *The percentage float at a S.G. of* 1·45 is the percentage by weight of the coal which has a S.G. less than 1·45. This float contains the majority of the coking constituents when these are present in a sample.

(ii) *The percentage of float at a S.G. of* 1·6 is the percentage by weight of the coal which has a S.G. less than 1·6. It represents approximately the amount of coal substance present and also gives an optimum figure for the performance of an ordinary washer on the coal. This figure subtracted from 100 gives the amount of adventitious matter in a coal sample. This cut at 1·6, together with that at 1·45, gives a rough idea of the distribution of the mineral matter in a sample.

(iii) *The percentage ash on the float at* 1·45 gives some indication of the minimum ash content likely to be obtained by washing.

(iv) *The percentage ash on the float at* 1·6 represents the amount of mineral matter intimately associated with the coal substance and as such furnishes a figure for the minimum ash content for a normal washed product from the particular sample.

(v) *The Woodall Duckham Swelling Number* (*Sw.N.*) is the ratio of the final to the initial volume of 1 gram of coal heated strongly under standard conditions and is a measure of the coking propensities of the coal.

This test is carried out according to B.S. Specification No. 804 of 1938, "The Crucible Swelling Test for Coal".

By 1 is denoted a residue of definite coke structure but no swelling, by 1 f a residue easily friable and possessed of no coke structure and 1 p denotes a residue in powder form. A value of 3 or more indicates definite coking possibilities.

(vi) If the float 1·45 material exhibits coking possibilities, further swelling number determinations are carried out on the S.G. 1·6 fraction. These figures give an indication of the coking propensity with this S.G. cut.

(d) *Voorlopige Dryfsel- en Sinksel- analises*

Monsters van 20 gram elk van die steenkool word in verskeie soortlike gewigsfraksies verdeel met behulp van petrol- en koolstoftetrachloriedmengsels en 'n sentrifuge. Die apparaat en die metode wat aangewend word, word deur P. E. Hall in die *Journal of the Chemical, Metallurgical and Mining Society of South Africa, Vol.* 34, *No.* 8, onder „A Specific Gravity Investigation of Coal Samples" beskryf.

(i) *Die persentasie dryfsel by 'n S.G. van* 1·45 is die gewigspersentasie van die steenkool wat 'n S.G. van minder as 1·45 het. Hierdie dryfsel bevat die merendeel van die verkooksende bestanddele, wanneer 'n monster sodanige bestanddele bevat.

(ii) *Die persentasie dryfsel by 'n S.G. van* 1·6 is die gewigspersentasie van die steenkool wat 'n S.G. van minder as 1·6 het. Dit verteenwoordig naasteby die hoeveelheid steenkoolmaterie wat aanwesig is en verstrek tewens 'n optimum syfer vir wat 'n gewone wasmasjien met die steenkool sal behaal. Word hierdie syfer van 100 afgetrek, dan gee dit die hoeveelheid bykomstige materiaal wat in 'n steenkoolmonster aanwesig is. Hierdie skeiding, tesaam met dié by 1·45, verstrek min of meer 'n aanduiding van die verspreiding van die mineraalbestanddele in 'n monster.

(iii) *Die persentasie as op die dryfsel by* 1·45 gee enigermate 'n aanduiding van die minimum asgehalte wat waarskynlik by die was van die steenkool verkry sal word.

(iv) *Die persentasie as op die dryfsel by* 1·6 verteenwoordig die hoeveelheid mineraalbestanddele wat intiem met die steenkoolmaterie geassosieer is en as sodanig verskaf dit 'n syfer vir die minimum asgehalte vir 'n normale gewaste produk uit die besondere monster.

(v) *Die Woodall-Duckham-Swelsyfer* (*Sw-Syf.*) is die verhouding van die eind- tot die beginvolume van 1 gram steenkool, sterk verhit onder standaardtoestande, en is 'n maatstaf van die verkooksingseienskappe van die steenkool. Hierdie toets word volgens die Britse Standaardspesifikasie No. 804 van 1938, „The Crucible Swelling Test for Coal", uitgevoer.

Met 1 word bedoel 'n residu met 'n bepaalde kooksstruktuur maar geen swelling nie. Met 1 f word bedoel 'n residu wat maklik verkrummel maar geen kooksstruktuur het nie. Met 1 p word bedoel 'n residu in poeiervorm. 'n Waarde van 3 of meer dui aan dat daar bepaald verkooksingsmoontlikhede is.

(vi) Indien die materiaal van die 1·45 dryfsel verkooksingsmoontlikhede toon, word verdere bepalings van die swelsyfer op die 1·6 S.G.-fraksie uitgevoer. Hierdie syfers gee 'n aanduiding van die verkooksingsvermoë by hierdie S.G.-skeiding.

D. THE BOREHOLE RECORDS—D. DIE BOORGATSTATE

BOREHOLE 1 : GROOTHOEK 1354 : BOORGAT 1

Core ⅞ in. Kern ⅞ dm.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. Vt.	In. Dm.	Ft. Vt.	In. Dm.	
Soil	13	6	—		Grond.
Sandstone, weathered	85	2	—		Sandsteen, verweer.
Pebbles of quartz	4	0	—		Kwartsspoelklippers.
Clay and pebbles	7	0	—		Klei en spoelklippers.
Sandstone, weathered	8	0	—		Sandsteen, verweer.
Sandstone, hard, white, fine-grained	21	3	138	11	Sandsteen, hard, wit, fynkorrelrig.
Sandstone, greyish, fine-grained	1	0	—		Sandsteen, grysagtig, fynkorrelrig.
Sandstone, white, fine-grained	1	2	—		Sandsteen, wit, fynkorrelrig.
Sandstone, greyish, black becoming blacker lower down	16	6	—		Sandsteen, grysagtig-swart, word swarter laeraf.
Shale, black, sandy, micaceous		5	—		Skalie, swart, sanderig, mikahoudend.
Sandstone, white, coarse-grained	3	8	—		Sandsteen, wit, grofkorrelrig.
Sandstone, black carbonaceous, coarse-grained, with few coal bands. Carries pyrites	2	11	—		Sandsteen, swart koolstofhoudend, grofkorrelrig, met enkele steenkoolbande. Bevat piriet.
COAL (broken) mostly dull, fairly soft	3	6	168	2	**STEENKOOL** (gebreek) meesal dof, taamlik sag.
Sandstone, greyish, medium to coarse-grained	7	7	—		Sandsteen, grysagtig, middel- tot grofkorrelrig
Shale, black sandy		9	—		Skalie, swart sanderig.
Sandstone, white, medium to coarse-grained	6	6	—		Sandsteen, wit, middel- tot grofkorrelrig.
Shale, black sandy		5	—		Skalie, swart sanderig.
Sandstone, greyish fine-grained	3	6	—		Sandsteen, grysagtig fynkorrelrig.
Sandstone, white, coarse-grained	10	8	—		Sandsteen, wit, grofkorrelrig.
Sandstone, fine-grained, shaly, with coarse-grained bands having greyish to blackish colour	19	4	216	10	Sandsteen, fynkorrelrig, skalieagtig, met grofkorrelrige bande van 'n grysagtige tot 'n swarterige kleur.
Shale, steel-coloured, hard		5	—		Skalie, staalkleurig, hard.
Sandstone, shaly, greyish-black	1	3	—		Sandsteen, skalieagtig, grysagtig-swart.
Shale, black	1	0	—		Skalie, swart.
Shale, steel-coloured		5	—		Skalie, staalkleurig.
Shale, black	2	3	—		Skalie, swart.
Sandstone band		2	—		Sandsteenband.
Shale, black	1	2	—		Skalie, swart.
Shale, steel-coloured		2½	—		Skalie, staalkleurig.
Shale, black with few sandstone bands	5	3½	229	0	Skalie, swart met enkele sandsteenbande.
Shale, black with occasional sandstone bands and occasional quartz grains	2	3	—		Skalie, swart met sandsteenbande hier en daar en kwartskorrels hier en daar.
Shale, steel-coloured		8	—		Skalie, staalkleurig.
Shale, black with occasional sandstone bands and occasional quartz grains	3	3	—		Skalie, swart met sandsteenbande hier en daar en kwartskorrels hier en daar.
Shale, steel-coloured	1	5	—		Skalie, staalkleurig.
Shale, black with occasional sandstone bands and occasional quartz grains	10	10	248	5	Skalie, swart met sandsteenbande hier en daar en kwartskorrels hier en daar.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth.* Ware diepte.		Aard van lae.
	Ft. *Vt.*	*In.* *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
Shale, steel-coloured........		11	—		Skalie, staalkleurig.
Shale, black, with occasional quartz grains	7	0	—		Skalie, swart, met kwartskorrels hier en daar.
Shale, greyish black........		4	—		Skalie, grysagtig-swart.
Shale, black carbonaceous, with occasional quartz grains	7	3	—		Skalie, swart, koolstofhoudend, met kwartskorrels hier en daar.
Shale, black...............		3	—		Skalie, swart.
Shale, black carbonaceous..	6	0	—		Skalie, swart koolstofhoudend.
Shale, steel-coloured........		4	—		Skalie, staalkleurig.
Shale, black carbonaceous..	4	9	—		Skalie, swart koolstofhoudend
Shale, steel-coloured........		3	—		Skalie, staalkleurig.
Shale, black, with quartz grains	29	7	305	1	Skalie, swart, met enkele kwartskorrels.
Shale, steel-coloured........		5	—		Skalie, staalkleurig.
Shale, black with occasional quartz grains	15	10	—		Skalie, swart, met enkele kwartskorrels.
Shale, black carbonaceous, with occasional quartz grains	6	3	—		Skalie, swart koolstofhoudend, met enkele kwartskorrels.
Shale, black, carbonacious..	5	6	—		Skalie, swart, koolstofhoudend.
Shale, black, carbonaceous in places. Carries calcite veins	22	2	—		Skalie, swart, plek-plek koolstofhoudend. Bevat kalsietare.
Shale, black carbonaceous in places	39	0	393	3	Skalie, plek-plek swart koolstofhoudend.
Shale, steel-coloured........		7	—		Skalie, staalkleurig.
Shale, black carbonaceous in places	29	0	—		Skalie, plek-plek swart koolstofhoudend.
Shale, steel-coloured........		7	—		Skalie, staalkleurig.
Shale, black carbonaceous in places	35	0	—		Skalie, plek-plek swart koolstofhoudend.
Mudstone band............		1	—		Moddersteenband.
Shale, black carbonaceous..	32	0	—		Skalie, swart koolstofhoudend.
Shale.....................		2	—		Skalie.
Shale, black carbonaceous..	26	7			Skalie, swart koolstofhoudend.
Sandstone band............		1			Sandsteenband.
Shale, black...............	3	7			Skalie, swart.
Quartzite.................		3	—		Kwartsiet.
Shale, black carbonaceous..	17	0	—		Skalie, swart koolstofhoudend.
Quartzite.................		1			Kwartsiet.
Shale, black carbonaceous..	9	3			Skalie, swart koolstofhoudend.
Shale, black...............	1	2	—		Skalie, swart.
Shale, slaty grey...........		4	—		Skalie, leikleurig-grys.
Shale, black, carbonaceous..	13	6			Skalie, swart, koolstofhoudend.
Shale, greyish black........	6	0	—		Skalie, grysagtig-swart.
Shale, greyish.............		7			Skalie, grysagtig.
Shale, grey, hard..........	41	5	610	6	Skalie, grys, hard.
Shale, grey, slaty, hard.....		4			Skalie, grys, leiagtig, hard.
Shale, with grains of quartz and felspar	2	0			Skalie met kwarts- en veldspaatkorrels.
Shale, with quartz grains...	1	3			Skalie, met kwartskorrels.
Mudstone, black, sandy.....		9	—		Moddersteen, swart, sanderig.
Shale, felspathic and carrying quartz	5	4	—		Skalie, veldspaties en kwarts bevattend.
Mudstone, black, sandy.....	1	5	—		Moddersteen, swart, sanderig.
Sandstone, white, fine-grained	5	7	627	2	Sandsteen, wit, fynkorrelrig.
Mudstone, black, sandy.....	1	0	—		Moddersteen, swart, sanderig.
Sandstone, white, fine-grained, hard, carries black sandy mudstone bands in middle	20	0	648	2	Sandsteen, wit, fynkorrelrig, hard, bevat swart sanderige moddersteenbande in die middel.
Sandstone, white, fine-grained, hard	19	0	—		Sandsteen, wit, fynkorrelrig, hard.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. *Vt.*	*In.* *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
Clayey band		11	—		Kleiagtige band.
Mudstone, black, sandy		9	—		Moddersteen, swart, sanderig.
Shale		11	—		Skalie.
Mudstone, black, sandy	2	0	—		Moddersteen, swart, sanderig.
Sandstone, fine-grained, hard, white		3	—		Sandsteen, fynkorrelrig, hard, wit.
Mudstone, black, sandy	12	11	—		Moddersteen, swart, sanderig.
Sandstone, shaly		5	—		Sandsteen, skalieagtig.
Mudstone, black, sandy	3	10	—		Moddersteen, swart, sanderig.
Sandstone, felspathic, medium-grained, soft, greyish white	1	7	—		Sandsteen, veldspaties, middelkorrelrig, sag, grysagtig-wit.
Sandstone, fine-grained greyish		6	—		Sandsteen, fynkorrelrig grysagtig.
Waterberg quartzitic sandstone	23	0	715	0	Waterberg-kwartsitiese sandsteen.

BOREHOLE 2 : GROOTHOEK 1354 : BOORGAT 2

Core 4 in. Kern 4 dm.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. *Vt.*	*In.* *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
Sand	31	0	—		Sand.
Clay, sandy	49	0	—		Klei, sanderig.
Clay containing quartz grit	30	0			Klei met kwartsgrintsteen.
Clay containing quartz pebbles	4	0	—		Klei, met kwartsspoelklippers.
Clay and grit	7	0	—		Klei en grintsteen.
Sandstone, fine-grained laminated	7	0	128	0	Sandsteen, fynkorrelrig, fyngelaag.
Sandstone, fine-grained white, hard	14	0	—		Sandsteen, fynkorrelrig wit, hard.
Sandstone, fine-grained white	3	6	—		Sandsteen, fynkorrelrig wit.
Sandstone, fine-grained blackish, carrying an occasional band of coarser sandstone	13	9	—		Sandsteen, fynkorrelrig swarterig en bevat enkele growwer sandsteenbande.
Sandstone, fine-grained, blackish with occasional bands of greyish black coarse-grained sandstone. Becomes shaly lower down	10	8	—		Sandsteen, fynkorrelrig, met grysagtig-swart grofkorrelrige sandsteenbande hier en daar. Word skalieagtig laeraf.
Shale, black, hard		8	—		Skalie, swart, hard.
Sandstone, coarse-grained to gritty, hard, carries occasional pyrite nodules	2	8	173	3	Sandsteen, grofkorrelrig tot grintsteenagtig hard, bevat pirietklonte hier en daar.
Coal		2	—		**Steenkool.**
Sandstone band		1	—		Sandsteenband.
Coal, dull with fine bright laminae		7½	—		**Steenkool**, dof met fyn blink lamelle.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. *Vt.*	*In.* *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
Sandstone band		½	—		Sandsteenband.
Coal	1	1	—		**Steenkool.**
Sandstone		1	—		Sandsteen.
Coal	2	3	—		**Steenkool.**
Pyrites nodules		1	—		Pirietklonte.
Coal, dull splinty	1	0	—		**Steenkool**, dof splinterig.
Coal, dull		11	—		**Steenkool,** dof.
Coal, dull and bright laminae, pyritic		5	180	0	**Steenkool,** dowwe en blink lamelle, pirities.
Sandstone, greyish white, becoming coarse-grained lower down.	1	0	—		Sandsteen, grysagtig-wit, word grofkorrelrig laeraf.
Sandstone, medium-grained, greyish with black band	2	1	—		Sandsteen, middelkorrelrig, grysagtig met swart band.
Coal, bright		1	183	4½	**Steenkool,** blink.
Sandstone, white and black with few coal stringers	1	1	—		Sandsteen, wit en swart met enkele steenkooluitlopers.
Sandstone, fine-grained	2	4	—		Sandsteen, fynkorrelrig.
Shale, black, sandy		9	—		Skalie, swart, sanderig.
Sandstone, greyish, black, medium-grained	1	2	—		Sandsteen, grysagtig, swart, middelkorrelrig.
Sandstone, white, gritty to coarse-grained carrying pyrite nodules and occasional quartz pebbles of approx. ½ in. diam.	5	8	—		Sandsteen. wit, grintsteenagtig tot grofkorrelrig met pirietklonte en hier en daar kwartsspoelklippers naasteby ½ dm. in deursnee.
Sandstone, black, fine-grained, micaceous		7	—		Sandsteen, swart, fynkorrelrig mikadraend.
Sandstone, greyish to black, micaceous where black	5	6	—		Sandsteen, grysagtig tot swart, mikadraend waar swart.
Sandstone, white, gritty.	5	4	—		Sandsteen, wit, grintsteenagtig.
Sandstone, black micaceous.		9	—		Sandsteen, swart mikadraend.
Sandstone, black, coarse-grained	1	7	—		Sandsteen, swart, middelkorrelrig.
Sandstone, black, fine-grained micaceous		4	—		Sandsteen, swart, fynkorrelrig. mikadraend.
Sandstone, white, coarse-grained to gritty	2	7	—		Sandsteen, wit grofkorrelrig tot grintsteenagtig.
Sandstone, greyish to black, fine-grained	1	0	—		Sandsteen, grysagtig tot swart, fynkorrelrig.
Sandstone, greyish to black, fine-grained with gritty bands	1	8	—		Sandsteen, grysagtig tot swart, fynkorrelrig met grintsteenagtige bande.
Sandstone, greyish, coarse-grained		8	—		Sandsteen, grysagtig, grofkorrelrig.
Sandstone, greyish to black, fine grained with coarse to gritty bands. Carries pyrite concentrations	5	8	—		Sandsteen, grysagtig tot swart, fynkorrelrig met grof tot grinterige bande. Bevat pirietkonsentrasies.
Sandstone, blackish, fine-grained	1	9	—		Sandsteen, swarterig, fynkorrelrig.
Sandstone, coarse-grained. .		4	—		Sandsteen, grofkorrelrig.
Shale, sandy, grey to black with many coarse-grained to gritty bands	9	0	—		Skalie, sanderig, grys tot swart met talle grofkorrelrige tot grinterige bande.
Shale, black, with occasional coarse-grained sandstone bands. Sometimes carbonaceous	10	10¾	—		Skalie, swart, met enkele grofkorrelrige sandsteenbande. Hier en daar koolstofhoudend.
Shale, black, with sandstone bands very sparsely developed. Carbonaceous in places	33	0	275	0	Skalie, swart met sandsteenbande baie yl ontwikkel. Hier en daar koolstofhoudend.

ANALYSIS OF SAMPLES FROM BOREHOLE 2, GROOTHOEK 1354, WATERBERG, DISTRICT TRANSVAAL

(1) Description of Samples

	Ft.	*In.*		
	173	3	Roof: Sandstone.	
K 285 D		2	**Coal**	49½ in. Dull **coal** with occasional bright banded sections of 2 in. to 3 in.
		1	Sandstone **excluded**	
		7½	**Coal**	
		½	Sandstone **excluded**	
		13	**Coal**	
		1	Sandstone **excluded**	
		27	**Coal**	
		1	Pyrites nodule **N.S.**	
C		12	Dull splinty **coal.**	
B		11	Dull **coal** with irregular fracture.	
A		5	Dull pyritic **coal**—top 1½ in. with bright bands (core broken).	
	180	0	Floor: Sandstone.	

ANALISE VAN MONSTERS UIT BOORGAT 2, GROOTHOEK 1354 DISTRIK WATERBERG, TRANSVAAL

(1) Beskrywing van monsters

	Vt.	*Dm.*		
	173	3	Dak: Sandsteen.	
K 285 D		2	**Steenkool**	49½ dm. Dowwe **steenkool** met blink gestreepte bande van 2 dm. tot 3 dm. hier en daar.
		1	Sandsteen **uitgeslote**	
		7½	**Steenkool**	
		½	Sandsteen **uitgeslote**	
		13	**Steenkool**	
		1	Sandsteen **uitgeslote**	
		27	**steenkool**	
		1	Pirietklont **N.G.**	
C		12	Dowwe splinterige **steenkool.**	
B		11	Dowwe **steenkool** met onreëlmatige breuk.	
A		5	Dowwe piritiese **steenkool**—top 1½ dm. met blink bande (kern gebreek).	
	180	0	Vloer: Sandsteen.	

B.H. 2 (*Contd.*). Bg. 2 (*Verv.*).

BOREHOLE 2: GROOTHOEK 1354: BOORGAT 2

(2) APPROXIMATE ANALYSES—(2) KORTANALISES

F.R.I. Sample Number. Nommer van monster B.-N.-I.	Width Ins. Wydte dm.	Cal. Val. lbs./lb. Vw. lbs./lb.	Percentage H_2O. Persentasie H_2O.	Percentage Ash. Persentasie as.	Percentage Vol. Matter. Persentasie vlugbestand.	Percentage fixed Carbon. Persentasie kookskoolstof.	Percentage Fl. 1·45. Persentasie dryfsel 1·45	Percentage Ash, Fl. 1·45. Persentasie as, dryfsel 1·45.	Percentage Fl. 1·6. Persentasie dryfsel 1·6.	Percentage Ash, Fl. 1·6. Persentasies, dryfsel 1·6.	Sw. No., Fl. 1·45. Sw.-Syf., dryfsel. 1·45.	Sw. No., Fl. 1·6. Sw.-Syf., dryfsel. 1·6.
K 285 D	49½	11·2	1·6	19·4	22·2	56·8	44·6	6·2	71·8	9·9	1 P	—
C	12	—	1·5	23·4	21·3	53·8	27·2	7·9	60·8	12·3	1 F	—
B	11	12·1	2·0	14·2	22·4	61·4	52·1	5·9	83·3	9·7	1 P	—
A	5	—	1·2	36·7	22·3	39·8	—	—	—	—	—	—
Average Gemiddelde B, C, D.	72½	—	1·6	19·3	22·1	57·0	42·9	6·4	71·8	10·1	—	—

BOREHOLE 3 : WELGELEGEN 1355 : BOORGAT 3

Core ⅞ in. Kern ⅞ dm.

Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.	Aard van lae.
	Ft. In. *Vt. Dm.*	*Ft. In.* *Vt. Dm.*	
Sand	11 0	—	Sand.
Sandstone, weathered	61 0	—	Sandsteen, verweer.
Sandstone, white, coarse and fine-grained	27 0	—	Sandsteen, wit, grof- en fynkorrelrig.
Sandstone, greyish, soft, shaly, laminated	4 6	—	Sandsteen, grysagtig, sag, skalieagtig, fyngelaagd.
Sandstone, white, coarse-grained	2 0	—	Sandsteen, wit, grofkorrelrig.
Shale, soft	4 6	110 0	Skalie, sag.
Sandstone, white, hard, coarse-grained, gritty in places.	13 8	—	Sandsteen, wit, hard, grofkorrelrig, plek-plek grintsteenagtig.
Sandstone, black, shaly micaceous	6	—	Sandsteen, swart, skalieagtig, mikadraend.
Sandstone, white, hard, coarse-grained	2 8	—	Sandsteen, wit, hard, grofkorrelrig.
Sandstone, black, shaly, micaceous	2	—	Sandsteen, swart, skalieagtig, mika-agtig.
Sandstone, white, with a light brownish tint in places, gritty	5 8	—	Sandsteen, wit, met 'n lig bruinerige tint hier en daar, grintsteenagtig.
Shale, sandy, black, micaceous	1 0	—	Skalie, sanderig, swart, mika-agtig.
Sandstone, greyish white, coarse-grained, sometimes becoming gritty	7 7	—	Sandsteen, grysagtig-wit, grofkorrelrig, word hier en daar grintsteenagtig.
Shale, sandy, black, micaceous	2	—	Skalie, sanderig, swart, mika-agtig.
Sandstone, greyish white, gritty	3 0	—	Sandsteen, grysagtig-wit, grintsteenagtig.
Sandstone and shale alternating, greyish black to black; the sandstone consists of quartz grains in a black muddy matrix. Pyritic	9 3	153 8	Sandsteen en skalie beurtelings, mika-agtig; grysagtig-swart tot swart; die sandsteen bestaan uit kwartskorrels in 'n swart modderrige grondmassa. Pirities.
Shale, black	10	—	Skalie, swart.
Sandstone, black, medium-grained	2	—	Sandsteen, swart, middelkorrelrig.
Shale, black carbonaceous, carries gritty bands	10	—	Skalie, swart koolstofhoudend, bevat grintsteenagtige bande.
Shale, black, alternating with dirty grey to blackish sandstone	5 6	—	Beurtelings skalie, swart en vuilgrys tot swarterige sandsteen.
Shale, steel-grey	5	—	Skalie, staalgrys.
Shale, black, carbonaceous, with some quartz grit...	2 4	—	Skalie, swart, koolstofhoudend met 'n bietjie kwartsgrintsteen.
Shale, black, carbonaceous, with a few sandstone bands	5 4	—	Skalie, swart, koolstofhoudend met enkele sandsteenbande.
Shale, sandy, black micaceous	5	—	Skalie, sanderig, swart mika-agtig.
Sandstone, dirty grey, hard, coarse-grained	5	—	Sandsteen, vuilgrys, hard, grofkorrelrig.
Shale, black, with an occasional quartz pebble	3 6	—	Skalie, swart, met kwartsspoelklippers hier en daar.
Shale, steel-grey	1 1	—	Skalie, staalgrys.
Shale, black, with an occasional quartz pebble	8 0	—	Skalie, swart, met kwartsspoelklippers hier en daar.

B.H. 3 (*Contd.*) Bg. 3 (*Verv.*)

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. *Vt.*	*In.* *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
Shale, steel-grey		3	—		Skalie, staalgrys.
Shale, black, with an occasional quartz pebble	10	0	—		Skalie, swart, met kwartsspoelklippers hier en daar.
Shale, steel-grey	1	1	—		Skalie, staalgrys.
Shale, black, with an occasional quartz pebble	5	6			Skalie, swart, met kwartsspoelklippers hier en daar.
Shale, steel-grey		7	—		Skalie, staalgrys.
Shale, black	8	7	—		Skalie, swart.
Shale, black, carbonaceous		10			Skalie, swart, koolstofhoudend.
Shale, black	5	9			Skalie, swart.
Shale, steel-grey		3	—		Skalie, staalgrys.
Shale, black, carbonaceous in places	24	3	—		Skalie, swart, plek-plek koolstofhoudend.
Sandstone band		1	—		Sandsteenband.
Shale, black, becoming carbonaceous at about 30 ft. from top	110	4	350	0	Skalie, swart, wat omtrent 30 vt. van bo koolstofhoudend word.

BOREHOLE 4 : EENDRACHT 1353 : BOORGAT 4

Core $\frac{7}{8}$ in. Kern $\frac{7}{8}$ dm.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. *Vt.*	*In.* *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
Soil	13	0	13	0	Grond.
Sandstone, weathered	100	0	113	0	Sandsteen, verweer.
Clay and quartz pebbles	27	0	140	0	Klei en kwartsspoelklippers.
Sandstone, greyish, soft	7	3	147	3	Sandsteen, grysagtig, sag.
Coal, dull and bright, with few shale bands		9	148	0	**Steenkool**, dof en blink, met enkele skaliebande.
Shale, coaly		6	148	6	Skalie, steenkoolagtig.
Coal, dull and bright, with few shale bands		8	149	2	**Steenkool**, dof en blink, met enkele skaliebande.
Shale, black, carbonaceous	1	7	152	2	Skalie, swart, koolstofhoudend.
Coal, dull and bright, with a few shale bands	1	1	—		**Steenkool**, dof en blink, met 'n paar skaliebande.
Coal and shale	1	7	156	4	**Steenkool** en skalie.
Coal and shale	1	10	—		**Steenkool** en skalie.
Coal, dull and bright, many shale bands		11	—		**Steenkool**, dof en blink, baie skaliebande.
Shale, black, carbonaceous, with 1 in. **coal** band		9	164	1	Skalie, swart, koolstofhoudend, met 1 dm. steenkoolband.
Shale and **Coal**	5	7	—		Skalie en **steenkool.**
Coal, dull and bright, with a few shale bands		9	173	0	**Steenkool**, dof en blink, met 'n paar skaliebande.
Shale and **coal**	2	1	177	0	Skalie en **steenkool.**
Shale, carbonaceous, with a few **coal** bands	13	1	193	8	Skalie, koolstofhoudend, met 'n paar **steenkoolbande.**
Coal, shaly		9	—		**Steenkool**, skalieagtig.
Shale, black, carbonaceous, with a few **coal** bands	4	8	202	6	Skalie, swart, koolstofhoudend, met 'n paar **steenkoolbande.**
Shale, black, carbonaceous, with a few **coal** bands	2	9	—		Skalie, swart, koolstofhoudend, met 'n paar **steenkoolbande.**
Coal, dull and bright		4	206	0	**Steenkool**, dof en glansend.

Nature of Strata.	Thickness Recovered. Dikte verkry. *Ft. Vt.*	*In. Dm.*	True Depth. Ware diepte. *Ft. Vt.*	*In. Dm.*	Aard van lae.
Coal, dull and bright		2	—		**Steenkool,** dof en glansend.
Shale, black, carbonaceous, with a few **coal** bands	4	2	—		Skalie, swart, koolstofhoudend, met 'n paar **steenkoolbande.**
Coal, dull and bright		9	215	0	**Steenkool,** dof en glansend.
Shale, black, carbonaceous, with a few **coal** bands	6	4	221	6	Skalie, swart, koolstofhoudend, met 'n paar **steenkoolbande.**
Shale, black, carbonaceous, with a few **coal** bands	1	2	—		Skalie, swart, koolstofhoudend, met 'n paar **steenkoolbande.**
Coal, dull and bright, with a few shale bands	1	3	226	0	**Steenkool,** dof en blink, met 'n paar skaliebande.
Shale, black, carbonaceous, with a few **coal** bands	6	5	234	6	Skalie, swart, koolstofhoudend, met 'n paar **steenkoolbande.**
Shale, black, carbonaceous, with a few **coal** bands		5	—		Skalie, swart, koolstofhoudend, met 'n paar **steenkoolbande.**
Coal, dull and bright, shaly in places	1	0	—		**Steenkool,** dof en glansend, plek-plek skalieagtig.
Shale, black, carbonaceous	3	0	—		Skalie, swart, koolstofhoudend.
Coal		4	241	0	**Steenkool.**
Coal, dull and bright	1	6	—		**Steenkool,** dof en glansend.
Shale and **coal**	1	3	245	0	Skalie en **steenkool.**
Coal, dull and bright		9	—		**Steenkool,** dof en glansend.
Shale, black, carbonaceous		9	—		Skalie, swart, koolstofhoudend.
Coal and shale		9	—		**Steenkool** en skalie.
Shale, black, carbonaceous, 1 in. **coal** near bottom		10	249	0	Skalie, swart, koolstofhoudend, 1 dm. **steenkool** na-aan bodem.
Shale, black, carbonaceous, 1 in. **coal** near bottom		4	—		Skalie, swart, koolstofhoudend, 1 dm. **steenkool** na-aan bodem.
Coal		3	—		**Steenkool.**
Shale, black, carbonaceous		6	—		Skalie, swart, koolstofhoudend.
Coal		7	—		**Steenkool.**
Shale		4	252	0	Skalie.
Shale, carbonaceous, with a few **coal** bands	4	8	257	6	Skalie, koolstofhoudend, met 'n paar steenkoolbande.
Coal, mainly bright		10	—		**Steenkool,** hoofsaaklik glansend.
Shale, carbonaceous	1	4	—		Skalie, koolstofhoudend.
Coal, mainly bright		5	—		**Steenkool,** hoofsaaklik glansend.
Shale, carbonaceous		8	263	0	Skalie, koolstofhoudend.
Shale, carbonaceous	1	8	—		Skalie, koolstofhoudend.
Coal, slightly shaly	1	2	—		**Steenkool,** effens skalieagtig.
Coal and shale	2	7	269	0	**Steenkool** en skalie.
Shale and **coal** (shale predominating)	6	6	275	6	Skalie en **steenkool** (skalie oorwegend).
Shale, carbonaceous, with a few **coal** bands	7	3	283	6	Skalie, koolstofhoudend, met 'n paar **steenkoolbande.**
Coal and shale	1	11	—		**Steenkool** en skalie.
Coal, mainly bright	1	0	—		**Steenkool,** hoofsaaklik glansend.
Shale, carbonaceous, with a few **coal** bands	4	4	—		Skalie, koolstofhoudend, met 'n paar **steenkoolbande.**
Coal, dull shaly	6	10	—		**Steenkool,** dof skalieagtig.
Shale, carbonaceous	7	3	—		Skalie, koolstofhoudend.
Shale, coaly		10	307	0	Skalie, steenkoolagtig.
Shale, carbonaceous, with **coal** in places.	7	9	—		Skalie, koolstofhoudend, met **steenkool** hier en daar.
Coal, dull and shaly	1	9	—		**Steenkool,** dof en skalieagtig.
Shale, carbonaceous		11	—		Skalie, koolstofhoudend.
Coal, lower 4 in. bright	1	0	319	6	**Steenkool,** onderste 4 dm. glansend.
Shale, black, carbonaceous	1	3	—		Skalie, swart, koolstofhoudend.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. *Vt.*	*In.* *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
Coal, dull and shaly in places	1	10	—		**Steenkool,** dof en plek-plek skalieagtig.
Shale, carbonaceous, coaly at top	4	1	—		Skalie, koolstofhoudend, steenkoolagtig bo-aan.
Shale, coaly		11	-		Skalie, steenkoolagtig.
Shale and **coal**	5	0	—		Skalie en **steenkool.**
Coal (carries pyrites)		5	—		**Steenkool** (bevat piriet).
Shale, carbonaceous		9	—		Skalie, koolstofhoudend.
Coal, shaly (carries pyrites)	3	2	—		**Steenkool,** skalieagtig (bevat piriet).
Shale, carbonaceous	1	9	—		Skalie, koolstofhoudend.
Coal, dull and shaly in places	1	5	340	0	**Steenkool,** dof en plek-plek skalieagtig.
Coal and shale	3	11	—		**Steenkool** en skalie.
Coal, dull	1	5	—		**Steenkool,** dof.
Shale, carbonaceous		7	346	0	Skalie, koolstofhoudend.
Coal, dull		11	—		**Steenkool,** dof.
Shale, carbonaceous		7	—		Skalie, koolstofhoudend.
Coal, dull and shaly in places	3	5	352	0	**Steenkool,** dof en plek-plek skalieagtig.
Coal, dull		3	—		**Steenkool,** dof.
Coal, shaly	1	5	—		**Steenkool,** skalieagtig.
Coal, dull, shaly in places	4	10	360	0	**Steenkool,** dof, plek-plek skalieagtig.
Coal, dull and bright, mainly dull (carries pyrites)	8	5	371	0	**Steenkool,** dof en glansend, hoofsaaklik dof (bevat piriet).
Coal		4	—		**Steenkool.**
Shale		1	—		Skalie.
Coal, dull and bright, shaly in places	3	8	375	1	**Steenkool,** dof en glansend, plek-plek skalieagtig.
Sandstone, white, fine-grained	3	1	—		Sandsteen, wit, fynkorrelrig.
Coal		2	—		**Steenkool.**
Sandstone, white, fine grained		4	378	6	Sandsteen, wit, fynkorrelrig.
Sandstone, white, fine-grained	1	10	—		Sandsteen, wit, fynkorrelrig.
Shale, black	1	3	—		Skalie, swart.
Sandstone, greyish, coarse-grained	2	8	—		Sandsteen, grysagtig, grofkorrelrig.
Coal, mainly bright, carries pyrites	1	3	386	0	**Steenkool,** hoofsaaklik glansend, bevat piriet.
Coal, dull and bright, mainly dull (carries pyrites).	5	5	392	8	**Steenkool,** dof en glansend, hoofsaaklik dof (bevat piriet).
Coal, dull and bright	9	6	—		**Steenkool,** dof en glansend.
Sandstone, greyish black, fine-grained	1	6	—		Sandsteen, grysagtig swart, fynkorrelrig.
Sandstone, whitish, fine-grained	10	3	416	0	Sandsteen, witagtig, fynkorrelrig.
Sandstone, whitish to greyish black, fine-grained	3	3	—		Sandsteen, witterig tot grysagtig-swart, fynkorrelrig.
Sandstone, blackish, shaly	4	1	—		Sandsteen, swarterig, skalieagtig.
Sandstone, dirty grey, black lower down near **coal**	4	3	431	0	Sandsteen, vuilgrys, swart laer-af na-aan **steenkool.**
Coal		3	431	3	**Steenkool.**
Coal, dull	9	3	—		**Steenkool,** dof.
Sandstone, coarse-grained, grey to white	14	8	—		Sandsteen, grofkorrelrig, grys tot wit.
Sandstone, medium-grained, grey to white	2	10	—		Sandsteen, middelkorrelrig, grys tot wit.
Sandstone, coarse-grained, grey to white	1	10	—		Sandsteen, grofkorrelrig, grys tot wit.
Sandstone, fine-grained, black-banded	1	10	—		Sandsteen, fynkorrelrig, met swart bande.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. *Vt.*	*In.* *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
Sandstone, coarse-grained, white	1	11	465	0	Sandsteen, grofkorrelrig, wit.
Sandstone, coarse-grained, white	2	0	—		Sandsteen, grofkorrelrig, wit.
Sandstone, coarse to gritty, greyish white, alternating with fine-grained black and black shaly sandstone	6	0	—		Sandsteen, grof tot grintsteenagtig, grysagtig-wit, beurtelings met fynkorrelrige swart en swart skalieagtige sandsteen.
Sandstone, fine-grained, shaly, laminated, micaceous, black to grey-black	5	11	479	0	Sandsteen, fynkorrelrig, skalieagtig, fyngelaag, mikadraend, swart tot grys-swart.
Shale, black, and shaly sandstone, alternating with thin sandstone bands	5	11	—		Skalie, swart, en skalieagtige sandsteen, beurtelings met dun sandsteenbande.
Shale, black, micaceous, with a few sandstone bands (2 in.–6 in.) and many thinner sandstone bands and scattered quartz grains	30	2	515	0	Skalie, swart, mikadraend, met 'n paar sandsteenbande (2 dm.–6 dm.) en talle dunner sandsteenbande en verspreide kwartskorrels.
Shale, black, with scattered quartz grains and 5 bands (4 in.–9 in.) of greyish black shale	48	0	563	0	Skalie, swart, met verspreide kwartskorrels en 5 bande (4 dm.–9 dm.) grysagtig-swart skalie.
Shale, black, micaceous, with only an occasional quartz grain. Slightly sandy at places and less micaceous towards bottom.	164	0	727	0	Skalie, swart, mikadraend, met slegs hier en daar 'n kwartskorrel. Plek-plek effens sanderig en minder mikadraend na onder.
Shale, black, with only an occasional quartz grain	15	0	742	0	Skalie, swart met slegs hier en daar 'n kwartskorrel.
Shale, black, slickensided. . . .		7	—		Skalie, swart, met wryfspieëls.
Shale, black, quartz grains more numerous, with a sandstone band of 2 in.	13	5	756	0	Skalie, swart, kwartskorrels talryker, met een sandsteenband 2 dm.
Shale, black, carrying pyrites	6	6	—		Skalie, swart, bevat piriet.
Shale, black, carrying a few sandstone bands	3	4	766	0	Skalie, swart, bevat 'n paar sandsteenbande.
Shale, black.	1	7	—		Skalie, swart.
Shale, bluish-grey, slaty	11	3	—		Skalie, blouerig-grys, leisteenagtig.
Shale, grey, slaty, banded with white and dark wavy laminae	2	8	—		Skalie, grys, leisteenagtig, gestreep met wit en donker gegolfde lamelle.
Sandstone, fine-grained, greyish, occasionally black-banded	25	8	807	2	Sandsteen, fynkorrelrig, grysagtig, met swart bande hier en daar.
Sandstone, carrying green and brownish grains of quartz. On the whole it has a slightly greenish tint	44	10	852	0	Sandsteen, met groen en bruinagtige kwartskorrels. Oor die algemeen het dit 'n effens groenagtige tint.

BOREHOLE 5 : GROOTGELUK 1360 : BOORGAT 5

Core 2⅛ in. Kern 2⅛ dm.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. *Vt.*	*In.* *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
Soil	4	0	4	0	Grond.
Gravel	6	0	10	0	Gruis.
Mudstone, shaly, sandy, becoming bluish lower down	49	0	59	0	Moddersteen, skalieagtig, sanderig, blouerig wordende laer-af.
Shale, black	1	0	60	0	Skalie, swart.
Shale, carbonaceous	2	2	—		Skalie, koolstofhoudend.
Coal, bright		5	—		**Steenkool,** glansend.
Shale, carbonaceous		5	—		Skalie, koolstofhoudend.
Coal, bright and carnaceous shale	1	1	—		**Steenkool,** glansend en koolstofhoudende skalie.
Shale, carbonaceous		11	—		Skalie, koolstofhoudend.
Coal, bright		9	—		**Steenkool,** glansend.
Shale, carbonaceous		5	—		Skalie, koolstofhoudend.
Coal, bright		8	—		**Steenkool,** glansend.
Shale, carbonaceous		4½	—		Skalie, koolstofhoudend.
Coal, bright		6½	—		**Steenkool,** glansend.
Shale, carbonaceous		4	—		Skalie, koolstofhoudend.
Coal, bright (very broken)		11½	—		**Steenkool,** glansend (baie gebreek).
Shale, carbonaceous		2	69	9	Skalie, koolstofhoudend.
Shale, carbonaceous	3	1	72	10	Skalie, koolstofhoudend.
Coal, bright		5	—		**Steenkool,** glansend.
Shale, carbonaceous		1	—		Skalie, koolstofhoudend.
Coal, fine bands and carbonaceous shale	1	11	—		**Steenkool,** fyn bande en koolstofhoudende skalie.
Shale, carbonaceous		9	—		Skalie, koolstofhoudend.
Coal, bright		9½	—		**Steenkool,** glansend.
Shale, carbonaceous		2½	—		Skalie, koolstofhoudend.
Coal, bright		7	—		**Steenkool,** glansend.
Shale, carbonaceous		8	—		Skalie, koolstofhoudend.
Coal, bright		4	—		**Steenkool,** glansend.
Shale, carbonaceous		3	—		Skalie, koolstofhoudend.
Coal, bright	1	8	—		**Steenkool,** glansend.
Shale, carbonaceous	1	2	84	3	Skalie, koolstofhoudend.
Shale, carbonaceous	1	8	—		Skalie, koolstofhoudend.
Coal, very bright banded	2	9	89	0	**Steenkool,** baie glansend gestreep.
Shale, carbonaceous		6	—		Skalie, koolstofhoudend.
Coal, bright and shale in thin bands	2	1	—		**Steenkool,** glansend en skalie in dun bande.
Shale, carbonaceous		4	—		Skalie, koolstofhoudend.
Coal, bright and shale in thin bands		9	—		**Steenkool,** glansend en skalie in dun bande.
Coal, very bright	2	10	—		**Steenkool,** baie glansend.
Shale, carbonaceous		2	—		Skalie, koolstofhoudend.
Coal, dull and bright thin bands	1	1	—		**Steenkool,** dowwe en glansende dun bande.
Coal, very bright	1	0	—		**Steenkool,** baie glansend.
Shale, carbonaceous		3½	—		Skalie, koolstofhoudend.
Coal, very bright banded	3	1	102	10	**Steenkool,** baie glansend gestreep.
Shale, carbonaceous	3	9	—		Skalie, koolstofhoudend.
Coal, bright banded		2	—		**Steenkool,** baie glansend.
Shale, carbonaceous		6	—		Skalie, koolstofhoudend.
Coal, bright banded		5	—		**Steenkool,** glansend gestreep.
Shale, carbonaceous		5	—		Skalie, koolstofhoudend.
Coal, bright banded		3	—		**Steenkool,** glansend gestreep.
Shale, carbonaceous		3½	—		Skalie, koolstofhoudend.
Coal, bright banded		10½	—		**Steenkool,** glansend gestreep.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. *Vt.*	*In.* *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
iale, carbonaceous........		10½	—		Skalie, koolstofhoudend.
al, bright banded........		4	110	8	**Steenkool,** glansend gestreep.
iale, carbonaceous........		2	—		Skalie, koolstofhoudend.
al, bright..............		3	—		**Steenkool,** glansend.
ale, carbonaceous........		5	—		Skalie, koolstofhoudend.
al, very bright, pyritic....	1	2	—		**Steenkool,** baie glansend, pirities.
ale....................		1½	—		Skalie.
al, very bright...........	3	2½	—		**Steenkool,** baie glansend.
ale, carbonaceous........	1	0	—		Skalie, koolstofhoudend.
al, very bright...........		10½	—		**Steenkool,** baie glansend.
iale, carbonaceous........		7	—		Skalie, koolstofhoudend.
al, bright; 2 in. carbonaceous shale 3 in. from top excluded	2	6	123	9	**Steenkool,** glansend; 2 dm. koolstofhoudende skalie 3 dm. van bo uitgesluit.
ale, carbonaceous........	9	4½	133	1½	Skalie, koolstofhoudend.
al, dull and bright.......		5	—		**Steenkool,** dof en glansend.
ale, carbonaceous........	1	1	—		Skalie, koolstofhoudend.
al, bright (broken core)...		9	—		**Steenkool,** glansend (gebreekte kern).
ale, carbonaceous........		2½	—		Skalie, koolstofhoudend.
al, bright..............	1	9	—		**Steenkool,** glansend.
ale carbonaceous.........		2	137	6	Skalie, koolstofhoudend.
ale, carbonaceous........	2	6	—		Skalie, koolstofhoudend.
al, very bright...........	1	4	—		**Steenkool,** baie glansend.
ale, carbonaceous........		4½	—		Skalie, koolstofhoudend.
al, bright..............		2½	—		**Steenkool,** glansend.
ale, carbonaceous........		2	—		Skalie, koolstofhoudend.
al, bright pyritic.........		5	—		**Steenkool,** glansend pirities.
ale, carbonaceous........		1	—		Skalie, koolstofhoudend.
al, very bright pyritic....		4½	—		**Steenkool,** baie glansend pirities.
ale, carbonaceous........		1	—		Skalie, koolstofhoudend.
al, bright..............		2	—		**Steenkool,** glansend.
ale, carbonaceous........		5	—		Skalie, koolstofhoudend.
al, very bright...........		7	—		**Steenkool,** baie glansend.
ale, carbonaceous........		8	—		Skalie, koolstofhoudend.
al, uniformly bright......	4	1	—		**Steenkool,** egalig glansend.
ale, carbonaceous........	1	1	—		Skalie, koolstofhoudend.
al, uniformly bright......	4	2	—		**Steenkool,** egalig glansend.
ale carbonaceous.........		3	—		Skalie, koolstofhoudend.
al, bright..............	1	0	—		**Steenkool,** glansend.
ale, carbonaceous........		1	—		Skalie, koolstofhoudend.
al, bright..............	1	5½	—		**Steenkool,** glansend.
ale, carbonaceous........		2	—		Skalie, koolstofhoudend.
al, bright..............		8½	—		**Steenkool,** glansend.
ale, carbonaceous with hin **coal** seams	1	3½	—		Skalie, koolstofhoudend met dun **steenkoollae.**
al, mixed..............		10	—		**Steenkool,** gemeng.
ale, carbonaceous........		2½	—		Skalie, koolstofhoudend.
al, mixed..............		4	—		**Steenkool,** gemeng.
ale, carbonaceous........		5	—		Skalie, koolstofhoudend.
al, mixed..............		8½	—		**Steenkool,** gemeng.
ale, carbonaceous........		1	—		Skalie, koolstofhoudend.
al, very bright...........	1	4	—		**Steenkool,** baie glansend.
ale, carbonaceous........		11½	—		Skalie, koolstofhoudend.
l, very bright...........		4½	—		**Steenkool,** baie glansend.
le, carbonaceous........		5	—		Skalie, koolstofhoudend.
l, bright..............		6	—		**Steenkool,** glansend.
le, carbonaceous........		7½	—		Skalie, koolstofhoudend.
l, bright..............		3	165	5	**Steenkool,** glansend.
le, carbonaceous........	9	6	174	11	Skalie, koolstofhoudend.
l, bright..............	1	4	—		**Steenkool,** glansend.
le, carbonaceous........		7½	—		Skalie, koolstofhoudend.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. Vt.	*In. Dm.*	*Ft. Vt.*	*In. Dm.*	
Coal, very bright	1	0½	—		**Steenkool,** baie glansend.
Shale, carbonaceous		3½	—		Skalie, koolstofhoudend.
Coal		1	—		**Steenkool.**
Shale, carbonaceous		11	—		Skalie, koolstofhoudend.
Coal		1½	—		**Steenkool.**
Shale, carbonaceous		3½	—		Skalie, koolstofhoudend.
Coal, bright pyritic		6	—		**Steenkool,** glansend pirities.
Shale, carbonaceous		2½	—		Skalie, koolstofhoudend.
Coal, bright		4½	—		**Steenkool,** glansend.
Shale, carbonaceous		3½	—		Skalie, koolstofhoudend.
Coal, bright		4½	—		**Steenkool,** glansend.
Shale, carbonaceous		5	—		Skalie, koolstofhoudend.
Coal		1½	—		**Steenkool.**
Shale, carbonaceous		6½	—		Skalie, koolstofhoudend.
Coal		2	—		**Steenkool.**
Shale, carbonaceous		3½	—		Skalie, koolstofhoudend.
Coal, bright	1	8½	184	6½	**Steenkool,** glansend.
Shale, carbonaceous with 3 thin bands of bright **coal**	3	1	—		Skalie, koolstofhoudend met 3 dun bande **glanskool.**
Coal, bright	1	1	—		**Steenkool,** glansend.
Shale, carbonaceous, with 2 thin bands of **coal**	1	8	—		Skalie, koolstofhoudend, met 2 dun **steenkoolbande.**
Coal, bright	2	1	—		**Steenkool,** glansend.
Shale		9	—		Skalie.
Shale, carbonaceous		10½	—		Skalie, koolstofhoudend.
Coal, bright		10	—		**Steenkool,** glansend.
Shale, carbonaceous, and few **coal** bands	4	5	—		Skalie, koolstofhoudend en min **steenkoolbande.**
Coal, bright		7½	—		**Steenkool,** glansend.
Shale, carbonaceous with many thin bright bands of **coal**	14	0	212	4	Skalie, koolstofhoudend met talryke glansende **steenkoolbande.**
Shale, carbonaceous	1	7	—		Skalie, koolstofhoudend.
Coal (broken core)	1	6	—		**Steenkool** (gebreekte kern).
Shale, carbonaceous	2	5	217	10	Skalie, koolstofhoudend.
Shale, carbonaceous	3	2	221	0	Skalie, koolstofhoudend.
Shale, carbonaceous		7	—		Skalie, koolstofhoudend.
Coal, bright with shale bands	2	1	—		**Steenkool,** glansend met skaliebande.
Shale, carbonaceous		10	224	6	Skalie, koolstofhoudend.
Shale, carbonaceous with **coal** bands	3	8	—		Skalie, koolstofhoudend met **steenkoolbande.**
Coal, bright		11	—		**Steenkool,** glansend.
Shale, carbonaceous	1	0	—		Skalie, koolstofhoudend.
Coal, bright		6	—		**Steenkool,** glansend.
Shale, carbonaceous		10	—		Skalie, koolstofhoudend.
Coal, bright		3	—		**Steenkool,** glansend.
Shale, carbonaceous		11	—		Skalie, koolstofhoudend.
Coal, bright		11	—		**Steenkool,** glansend.
Shale, carbonaceous		6	233	2	Skalie, koolstofhoudend.
Shale carbonaceous	4	11	238	1	Skalie, koolstofhoudend.
Coal, bright		3	—		**Steenkool,** glansend.
Shale, carbonaceous		2	—		Skalie, koolstofhoudend.
Coal, bright		2	—		**Steenkool,** glansend.
Shale, carbonaceous		10	—		Skalie, koolstofhoudend.
Coal, bright		4	—		**Steenkool,** glansend.
Shale, carbonaceous	3	1	—		Skalie, koolstofhoudend.
Coal, bright		4	—		**Steenkool,** glansend.
Shale, carbonaceous		8½	—		Skalie, koolstofhoudend.
Coal, bright	1	2	—		**Steenkool,** glansend.
Shale, carbonaceous	2	4½	247	6	Skalie, koolstofhoudend.
Shale, carbonaceous, with **coal** bands	4	11	252	5	Skalie, koolstofhoudend met **steenkoolbande.**

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. Vt.	*In. Dm.*	*Ft. Vt.*	*In. Dm.*	
Shale, carbonaceous, with numerous bright **coal** bands and five 1 in. bands of **coal**	19	5	—		Skalie, koolstofhoudend met talryke glansende **steenkoolbande** en vyf 1 dm. **steenkoolbande.**
Coal, dull granular	2	2	—		**Steenkool,** dof korrelrig.
Coal, very bright		5	—		**Steenkool,** baie glansend.
Shale, with **coal** stringers		6	—		Skalie met **steenkooluitlopers.**
Coal, mainly dull granular	3	9	—		**Steenkool,** hoofsaaklik dof korrelrig.
Coal, mainly very bright	3	7	—		**Steenkool,** hoofsaaklik baie glansend.
Shale, carbonaceous and shaly **coal**	1	9	284	0	Skalie, koolstofhoudend en skalieagtige **steenkool.**
Shale, carbonaceous	6	0	290	0	Skalie, koolstofhoudend.
Coal		7	—		**Steenkool.**
Shale, carbonaceous, with a few **coal** bands	4	10	—		Skalie, koolstofhoudend met 'n paar **steenkoolbande.**
Coal, pyritic		9	—		**Steenkool,** pirities.
Shale, carbonaceous	4	0	300	2	Skalie, koolstofhoudend.
Coal, dull	1	8	—		**Steenkool,** dof.
Shale carbonaceous		7	—		Skalie, koolstofhoudend.
Coal, mainly dull	2	1	—		**Steenkool,** hoofsaaklik dof.
Shale, carbonaceous		8	305	2	Skalie, koolstofhoudend.
Shale, carbonaceous	4	7	—		Skalie, koolstofhoudend.
Shale, brownish	5	8	—		Skalie, bruinerig.
Coal		2	—		**Steenkool.**
Shale, brownish		1	—		Skalie, bruinerig.
Coal, dull shaly	1	1	—		**Steenkool,** dof skalieagtig.
Shale, carbonaceous		9	317	6	Skalie, koolstofhoudend.
Coal, non-banded, with lustre	1	1	—		**Steenkool,** nie gestreep, met glans.
Coal, light, very soft, dull		6	—		**Steenkool,** lig, baie sag, dof.
Coal, mainly dull	4	5	—		**Steenkool,** hoofsaaklik dof.
Coal, very dull		7	—		**Steenkool,** baie dof.
Coal, mainly dull	1	5	—		**Steenkool,** hoofsaaklik dof.
Coal, shale and stone		3	—		**Steenkool,** skalie en klip.
Coal, mainly dull, occasionally thin shale bands and pyrite bands	12	10	—		**Steenkool,** hoofsaaklik dof, hier en daar skaliebande en pirietbande.
Coal, mixed, mainly bright pyritic	2	5	341	0	**Steenkool,** gemeng, hoofsaaklik glansend pirities.
Sandstone, black, fine-grained	8	0	—		Sandsteen, swart, fynkorrelrig.
Sandstone, coarse-grained grey to black	1	0	—		Sandsteen, grofkorrelrig, grys tot swart.
Sandstone and shale alternating		8	—		Sandsteen en skalie beurtelings.
Sandstone, shale and coal bands		4	351	0	Sandsteen, skalie en steenkoolbande.
Coal, mixed		2	—		**Steenkool,** gemeng.
Coal, dull non-banded	3	1	—		**Steenkool,** dof, nie-gestreep.
Coal, mainly dull	3	10	—		**Steenkool,** hoofsaaklik dof.
Sandstone, shaly		1	—		Sandsteen, skalieagtig.
Coal, dull	4	2	—		**Steenkool,** dof.
Coal, mixed	1	10	364	0	**Steenkool,** gemeng.
Sandstone	53	4	417	4	Sandsteen.
Coal, mainly dull	4	2	—		**Steenkool,** hoofsaaklik dof.
Shale and coal		2	—		Skalie, en **steenkool.**
Coal, mixed, mainly dull		7	—		**Steenkool,** gemeng, hoofsaaklik dof.
Sandstone		2	—		Sandsteen.
Coal, mixed		5	422	10	**Steenkool,** gemeng.
Sandstone, shaly banded	25	2	448	0	Sandsteen, skalieagtig gestreep.
Sandstone, coarse-grained	2	0	450	0	Sandsteen, grofkorrelrig.

BOREHOLE 5 : GROOTGELUK 1360 : BOORGAT 5

F.R.I. Sample No. No. van monster B.-N.-I.	Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.	Aard van lae.
		In. *Dm.*	*Ft. In.* *Vt. Dm.*	
L 48	Roof, Carbonaceous shale	—	60 9	Dak, koolstofhoudend skalie.
	Carbonaceous shale, **N.S.**	26	—	Koolstofhoudende skalie, **N.G.**
	Brightz **coal**.........	5	—	**Glanskool.**
	Carbonaceous shale, **N.S.**	5	—	Koolstofhoudende skalie, **N.G.**
	Bright **coal** and carbonaceous shale	13	—	**Glanskool** en koolstofhoudende skalie.
	Carbonaceous shale, **N.S.**	11	—	Koolstofhoudende skalie, **N.G.**
	Bright **coal**...........	9		Glanskool.
	Carbonaceous shale, **N.S.**	5	—	Koolstofhoudende **N.G.**
	Bright **coal**...........	8	—	**Glanskool.**
	Carbonaceous shale, **N.S.**	4½	—	Koolstofhoudende skalie, **N.G.**
	Bright **coal**...........	6½	—	**Glanskool.**
	Carbonaceous shale, **N.S.**	4		Koolstofhoudende skalie, **N.G.**
	Bright **coal** (very broken)	11½	—	**Glanskool** (baie gebreek)
	Carbonaceous shale, **N.S.**	2	69 9	Koolstofhoudende skalie, **N.G.**
	N.B. 6½' lost, 110½' recovered.			**N.B.** 6½' verloor, 110½ behou.
	—	—	72 10	—
L 49	Carbonaceous shale, **N.S.**	11		Koolstofhoudende skalie, **N.G.**
B	Bright **coal**...........	5	—	**Glanskool.**
	Carbonaceous shale, **N.S.**	1	—	Koolstofhoudende skalie, **N.G.**
	Fine bands of **coal** and carbonaceous shale	23	—	Fyn bande **steenkool** en koolstofhoudende skalie.
	Carbonaceous shale, **N.S.**	9	—	Koolstofhoudende skalie, **N.G.**
A	Bright **coal**...........	9½	—	**Glanskool.**
	Carbonaceous shale, **N.S.**	2½	—	Koolstofhoudende skalie, **N.G.**
	Bright **coal**...........	7	—	**Glanskool.**
	Carbonaceous shale, **N.S.**	8	—	Koolstofhoudende skalie, **N.G.**
	Bright **coal**...........	4	—	**Glanskool.**
	Carbonaceous shale, **N.S.**	3	—	Koolstofhoudende skalie, **N.G.**
	Bright **coal**...........	20	—	**Glanskool.**
	Carbonaceous shale, **N.S.**	14	84 3	Koolstofhoudende skalie, **N.G.**
	N.B. 20" lost, 117" recovered			**N.B.** 20" verloor, 117 behou.
	—		85 11	—
L 50	Very bright banded **coal**	33	89 0	Gestreepte **steenkool**, baie glansend.
	N.B. 4" lost 33" recovered			**N.B.** 4" verloor, 33 behou.

F.R.I. ample No. No. van monster B.-N.-I.	Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.	Aard van lae.
		In. *Dm.*	*Ft. In.* *Vt. Dm.*	
51	—	—	89 6	—
	Bright **coal** and shale in thin bands	25	—	**Glanskool** en skalie in dun lagies.
E	Carbonaceous shale, **N.S.**	4	—	Koolstofhoudende skalie, **N.G.**
	Bright **coal** and shale in thin bands	9	—	**Glanskool** en skalie in dun lagies.
D	Very bright **coal**....	34	—	**Steenkool,** baie glansend.
	Carbonaceous shale, **N.S.**	2	—	Koolstofhoudende skalie, **N.G.**
C	Thin bands of dull and bright **coal**	13	—	Dun bande dowwe en glansende **steenkool.**
B	Very bright **coal**......	12	—	**Steenkool,** baie glansend.
	Carbonaceous shale, **N.S.**	3½	—	Koolstofhoudende skalie, **N.G.**
A	Very bright banded, smith-looking **coal**	37	102 10	**Steenkool,** baie glansend, gestreep; lyk op **smidskool.**
	N.B. 20″ core lost, 140″ core recovered			**N.B.** 20″ van kern verloor, 140″ van kern behou.
52	—	—	106 2	—
	Carbonaceous shale, **N.S.**	5	—	Koolstofhoudende skalie, **N.G.**
	Coal................	2	—	**Steenkool.**
	Carbonaceous shale, **N.S.**	6	—	Koolstofhoudende skalie, **N.G.**
	Coal................	5	—	**Steenkool.**
	Carbonaceous shale, **N.S.**	5	—	Koolstofhoudende skalie, **N.G.**
	Coal................	3	—	**Steenkool.**
	Carbonaceous shale, **N.S.**	3½	—	Koolstofhoudende skalie, **N.G.**
	Coal................	10½	—	**Steenkool.**
	Carbonaceous shale, **N.S.**	10½	—	Koolstofhoudende skalie, **N.G.**
	Coal................	4	110 8	**Steenkool.**
	N.B. All coal bright banded			**N.B.** Alle steenkool glansend en gestreep.
67	Carbonaceous shale, **N.S.**	2	110 10	Koolstofhoudende skalie, **N.G.**
	Bright **coal**..........	3	111 0	**Glanskool.**
	Carbonaceous shale, **N.S.**	5	—	Koolstofhoudende skalie, **N.G.**
C	Very bright **coal**: pyritic: vertical pyritic vein excluded (¼″ × 5″)	14	—	**Steenkool,** baie glansend: pirities: vertikale piritiese aar uitgeslote (¼″ × 5″).
	Carbonacous sandstone, **N.S.**	1½	—	Koolstofhoudende sandsteen, **N.G.**
	Very bright **coal**......	38½	—	**Steenkool,** baie glansend.
	Carbonaceous shale, **N.S.**	12	—	Koolstofhoudende skalie, **N.G.**
B	Very bright **coal**......	10½	—	**Steenkool,** baie glansend.
	Carbonaceous sandstone, **N.G.**	7	—	Koolstofhoudende sandsteen, **N.G.**
A	Very bright **coal**: 2″ carbonaceous sandstone 3″ from top excluded	30	123 9	**Steenkool,** baie glansend, 2″ koolstofhoudende sandsteen 3″ van bo uitgeslote.
	N.B. 122″ only recovered			**N.B.** Slegs 122″ behou.

F.R.I. Sample No. No. van monster B.-N.-I.	Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.	Aard van lae.
		In. *Dm.*	*Ft. In.* *Vt. Dm.*	
L 68	—	—	132 6	
	Carbonaceous shale, **N.S.**	7½	—	Koolstofhoudende skalie, **N.G.**
C	Mixed dull and bright **coal**	5	—	Dowwe en glansende **steenkool** gemeng
	Carbonaceous shale, **N.S.**	13	—	Koolstofhoudende skalie, **N.G.**
B	Bright **coal** (broken core)	9	—	**Glanskool** (gebreekte kern)
	Shale and carbonaceous shale, **N.S.**	2½	—	Skalie en koolstofhoudende skalie, **N.G.**
A	Bright **coal**..........	21	—	**Glanskool.**
	Carbonaceous shale, **N.S.**	2	137 6	Koolstofhoudende skalie, **N.G.**
L 69	—	—	139 6	—
	Carbonaceous shale, **N.S.**	6	—	Koolstofhoudende skalie, **N.G.**
H	Very bright **coal**......	16	—	**Steenkool,** baie glansend.
	Carbonaceous shale, **N.S.**	4½	—	Koolstofhoudende skalie, **N.G.**
	Bright **coal**..........	2½	—	**Glanskool.**
	Carbonaceous shale, **N.S.**	2	—	Koolstofhoudende skalie, **N.G.**
	Bright **coal,** pyritic..	5	—	**Glanskool,** pirities.
G	Carbonaceous shale, **N.S.**	1	—	Koolstofhoudende skalie, **N.G.**
	Very bright **coal,** pyritic	4½	—	**Steenkool,** baie glansend, pirities.
	Carbonaceous shale, **N.S.**	1	—	Koolstofhoudende skalie, **N.G.**
	Bright **coal**..........	2	—	**Glanskool.**
	Carbonaceous shale, **N.S.**	5	—	Koolstofhoudende skalie, **N.G.**
	Very bright **coal**......	7	—	**Steenkool,** baie glansend.
	Carbonaceous shale, **N.S.**	8	—	Koolstofhoudende skalie, **N.G.**
F	Uniform bright **coal**....	49	—	Egalige **glanskool.**
	Carbonaceous shale, **N.S.**	13	—	Koolstofhoudende skalie, **N.G.**
E	Uniform bright **coal**...	50	—	Egalige **glanskool.**
	Carbonaceous shale, **N.S.**	3	—	Koolstofhoudende skalie, **N.G.**
	Bright **coal**..........	12	—	**Glanskool.**
	Carbonaceous shale, **N.S.**	1	—	Koolstofhoudende skalie, **N.G.**
L 69 D	Bright **coal**..........	17½	—	**Glanskool.**
	Carbonaceous shale, **N.S.**	2	—	Koolstofhoudende skalie, **N.G.**
	Bright **coal**..........	8½	—	**Glanskool.**
	Carbonaceous shale with thin **coal** bands, **N.S.**	15½	—	Koolstofhoudende skalie met dun **steenkoolbande, N.G.**
	Mixed **coal**..........	10	—	Gemengde **steenkool.**
	Carbonaceous shale, **N.S.**	2½	—	Koolstofhoudende skalie, **N.G.**
C	Mixed **coal**..........	4	—	Gemengde **steenkool.**
	Carbonaceous shale, **N.S.**	5	—	Koolstofhoudende skalie, **N.G.**
	Mixed **coal**..........	8½	—	Gemengde **steenkool.**
	Carbonaceous shale, **N.S.**	1	—	Koolstofhoudende skalie, **N.G.**
B	Very bright **coal**......	16	—	**Steenkool,** baie glansend.
	Carbonaceous shale, **N.S.**	11½	—	Koolstofhoudende skalie, **N.G.**

F.R.I. ample No. No. van monster B.-N.-I.	Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.		Aard van lae.
		In. *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
69	Very bright **coal**	4½	—		**Steenkool,** baie glansend.
	Carbonaceous shale, **N.S.**	5	—		Koolstofhoudende skalie, **N.G.**
A	Bright **coal**	6	—		**Glanskool.**
	Carbonaceous shale, **N.S.**	7½	—		Koolstofhoudende skalie, **N.G.**
	Bright **coal**	3	165	5	**Glanskool.**
70	—	—	174	11	—
H	Bright **coal**	16	—		**Glanskool.**
	Carbonaceous shale, **N.S.**	7½	—		Koolstofhoudende skalie, **N.G.**
G	Very bright **coal**	12½	—		**Steenkool,** baie glansend.
	Carbonaceous shale, **N.S.**	3½	—		Koolstofhoudende skalie, **N.G.**
	Coal, N.S.	1	—		**Steenkool, N.G.**
	Carbonaceous shale, **N.S.**	11	—		Koolstofhoudende skalie, **N.G.**
	Coal, N.S.	1½	—		**Steenkool, N.G.**
	Carbonaceous shale, **N.S.**	3½	—		Koolstofhoudende skalie, **N.G.**
	Bright **coal,** pyritic, ½″ pyritic stringer excluded	6	—		**Glanskool,** pirities, ½″ piritiese uitloper uitgeslote.
	Carbonaceous shale, **N.S.**	2½	—		Koolstofhoudende skalie, **N.G.**
	Bright **coal**	4½	—		**Glanskool.**
	Carbonaceous shale, **N.S.**	3½	—		Koolstofhoudende skalie, **N.G.**
	Bright **coal**	4½	—		**Glanskool.**
	Carbonaceous shale, **N.S.**	5	—		Koolstofhoudende skalie, **N.G.**
	Coal, N.S.	1½	—		**Steenkool, N.G.**
	Carbonaceous shale, **N.S.**	6½	—		Koolstofhoudende skalie, **N.G.**
	Coal, N.S.	2	—		**Steenkool, N.G.**
	Carbonaceous shale, **N.S.**	3½	—		Koolstofhoudende skalie, **N.G.**
E	Bright **coal**	20½	—		**Glanskool.**
	Carbonaceous shale, with 3 thin bands of bright **coal, N.S.**	37	—		Koolstofhoudende skalie met 3 dun **glanskoolbande, N.G.**
D	Bright **coal**	13	—		**Glanskool.**
	Carbonaceous shale, with 2 thin bands of **coal, N.S.**	20	—		Koolstofhoudende skalie met 2 dun **steenkoolbande, N.G.**
C	Bright **coal** (pyritic)	25	—		**Glanskool** (pirities).
	Ferruginous sandstone, **N.S.**	6	—		Ysterdraende sandsteen, **N.G.**
	Ferruginous sandstone and **coal, N.S.**	3	—		Ysterdraende sandsteen en **steenkool, N.G.**
	Carbonaceous shale, **N.S.**	10½	—		Koolstofhoudende skalie, **N.G.**
B	Banded bright **coal**	10	—		**Streepglanskool.**
	Carbonaceous shale with 4 thin bands of bright **coal, N.S.**	53	—		Koolstofhoudende skalie met 4 dun **glanskoolbande, N.G.**
A	Bright **coal**	7½	—		**Glanskool.**
	Carbonaceous shale with many thin bright bands of **coal, N.S.**	168	212	4	Koolstofhoudende skalie met talle dun **steenkoolbande, N.G.**

F.R.I. Sample No. No. van monster B.-N.-I.	Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.	Aard van lae.
		In. *Dm.*	*Ft. In.* *Vt. Dm.*	
L 71	**Coal** (broken core) 1″ carbonaceous shale in middle excluded	18	213 11	**Steenkool** (gebreekte kern) 1″ koolstofhoudende skalie in die middel uitgeslote.
	27½″ carbonaceous shale plus 1½″ bright coal at bottom, **N.S.**	29	217 10	27½″ koolstofhoudende skalie plus 1½″ glanskool onderaan, **N.G.**
L 72	—	—	221 0	—
	Carbonaceous shale, **N.S.**	7	—	Koolstofhoudende skalie, **N.G.**
B	Bright **coal** with shale bands	25	—	**Glanskool** met skaliebande.
	Carbonaceous shale, **N.S.**	44	—	Koolstofhoudende skalie, **N.G.**
A	Bright **coal**...........	11	—	**Glanskool.**
	Carbonaceous shale, **N.S.**	12	—	Koolstofhoudende skalie, N.G.
	Bright **coal**...........	6	—	**Glanskool.**
	Carbonaceous shale, **N.S.**	10	—	Koolstofhoudende skalie, **N.G.**
	Bright **coal**...........	3	—	**Glanskool.**
	Carbonaceous shale, **N.S.**	11	—	Koolstofhoudende skalie, **N.G.**
	Bright **coal**...........	11	—	**Glanskool.**
	Carbonaceous shale, **N.S.**	6	233 2	Koolstofhoudende skalie, **N.G.**
L 73	—	—	237 6	—
	Carbonaceous shale, **N.S.**	7	—	Koolstofhoudende skalie, **N.G.**
	Bright coal, **N.S.**.....	3	—	Glanskool, **N.G.**
	Carbonaceous shale, **N.S.**	2		Koolstofhoudende skalie, **N.G.**
	Bright coal, **N.S.**.......	2	—	**Glanskool, N.G.**
	Carbonaceous shale, **N.S.**	10	—	Koolstofhoudende skalie, **N.G.**
	Bright coal, **N.S.**.......	4	—	**Glanskool, N.G.**
	Carbonaceous shale, **N.S.**	37	—	Koolstofhoudende skalie, **N.G.**
	Bright **coal, N.S.**.......	4	—	**Glanskool, N.G.**
	Carbonaceous shale, **N.S.**	8½	—	Koolstofhoudende skalie, **N.G.**
	Bright **coal**...........	14	—	**Glanskool.**
	Carbonaceous shale with 3″ shaly coal in middle, **N.S.**	28½	247 6	Koolstofhoudende skalie met 3″ skalieagtige steenkool in die middel, **N.G.**
L 50	—	—	252 5	—
	Carbonaceous shale with numerous very thin bright **coal** bands and five 1″ bands of **coal, N.S.**	233	—	Koolstofhoudende skalie met talryke baie dun **glanskoolbande** en vyf 1″ **steenkoolbande, N.G.**
D	Dull granular **coal**....	26	—	Dowwe korrelrige **steenkool.**
C	Very bright **coal**......	5	—	**Steenkool,** baie glansend.
	Shale with a few **coal** stringers, **N.S.**	6	—	Skalie met enkele **steenkooluitlopers, N.G.**

F.R.I. Sample No. No. van monster B.-N.-I.	Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.	Aard van lae.
		In. *Dm.*	*Ft. In.* *Vt. Dm.*	
L 89 B	Mainly dull granular **coal** with a few broad bright bands; 1″ shaly sandstone in middle excluded	45	—	Hoofsaaklik dowwe korrelrige **steenkool** met enkele breë glansende bande; 1″ skalieagtige steenkool in die middel uitgeslote.
A	Mainly very bright **coal** with a few dull bands, 4″ shaly sandstone 15″ from bottom excluded	43	—	Hoofsaaklik baie glansende **steenkool,** met enkele dowwe bande, 4″ skalieagtige sandsteen 15″ van onder uitgeslote.
	Carbonaceous shale and shaly **coal, N.S.**	21	284 0	Koolstofhoudende skalie en skalieagtige **steenkool, N.G.**
L 90	—	—	300 0	—
	Shale, **N.S.**............	2	—	Skalie, **N.G.**
	Dull **coal**.............	20	—	Dowwe **steenkool.**
	Carbonaceous shale, **N.S.**	7	—	Koolstofhoudende skalie, **N.G.**
	Mixed mainly dull **coal**	25	—	Gemengde **steenkool,** hoofsaaklik dof.
	Carbonaceous shale, **N.S.**	8	—	Koolstofhoudende skalie, **N.G.**
	Floor: Shale.........	—	305 2	Vloer: Skalie.
L 91	Roof: **Coal** with shale bands	—	317 6	Dak: **Steenkool** met skaliebande.
G	Non-banded **coal** with lustre	13	—	Nie-gestreepte **steenkool** met glans.
F	Light very soft dull **coal** (mud ?)	6	—	Ligte baie sagte dowwe **steenkool** (modder ?)
E	Mainly dull **coal**......	53	—	Hoofsaaklik dowwe **steenkool.**
D	Very dull **coal**........	7	—	Baie dowwe **steenkool.**
C	Mainly dull **coal**......	17	—	Hoofsaaklik dowwe **steenkool.**
	Stone, shale and **coal, N.S.**	3	—	Klip, skalie en steenkool, **N.G.**
B	Mainly dull **coal**; two ½″ pyrite bands excluded; very pyritic, occasional thin shale bands present	154	—	Hoofsaaklik dowwe **steenkool** twee ½″ pirietbande uitgeslote; baie pirities, dun skaliebande hier en daar aanwesig.
A	Mixed **coal,** mainly bright, pyritic	29		Gemengde **steenkool,** hoofsaaklik glansend pirities.
	Floor: Sandstone.....	—	341 0	Vloer: Sandsteen.
L 92	Roof: Sandstone.....	—	351 0	Dak: Sandsteen.
D	Mixed **coal**...........	2 }	—	Gemengde **steenkool.**
	Dull non-banded **coal**.	37 }	—	Dowwe nie-gestreepte **steenkool.**
C	Mixed, mainly dull **coal,** 1″ pyrites excluded	46	—	Gemengd, hoofsaaklik dowwe **steenkool,** 1″ piriet uitgeslote.
	Shaly sandstone, **N.S.**	1	—	Skalieagtige sandsteen, **N.G.**

F.R.I. Sample No. No. van monster B.-N.-I.	Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.	Aard van lae.
		In. *Dm.*	*Ft. In.* *Vt. Dm.*	
L 92				
B	Dull **coal,** 1" pyritic sandstone excluded	50	—	Dowwe **steenkool,** 1" piritiese sandsteen uitgeslote.
A	Mixed **coal**...........	20	—	Gemengde **steenkool.**
	Floor : Sandstone.....	—	364 0	Vloer : Sandsteen.
L 93	Roof : coarse-grained sandstone	—	417 4	Dak : grofkorrelrige sandsteen.
	Mixed, mainly dull coal	50	—	Gemengd, hoofsaaklik dowwe **steenkool.**
	Shale and coal, **N.S.**			Skalie en **steenkool, N.G.**
	Mixed, mainly dull coal	7	—	Gemengd hoofsaaklik dowwe **steenkool.**
	Laminated sandstone, **N.S.**	2	—	Fyngelaagde sandsteen, **N.G.**
	Mixed **coal**...........	5	—	Gemengde **steenkool.**
	Floor : Banded shaly sandstone	—	422 10	Vloer : gebande skalie-agtige sandsteen.

BOREHOLE 5: GROOTGELUK 1360: BOORGAT 5

(2) PROXIMATE ANALYSES—(2) KORTANALISES

F.R.I. Sample Number. Nommer van monster B.-N.-I.		Width ins. Wydte dm.	Cal. Val. lbs./lb. Vw. lbs./lb.	Percentage H_2O. Persentasie H_2O.	Percentage Ash. Persentasie as.	Percentage Vol. Matter. Persentasie vlugbestand.	Percentage fixed Carbon. Persentasie kookskoolstof.	Percentage Fl. 1·45. Persentasie dryfsel 1·45.	Percentage Ash, Fl. 1·45. Persentasie as, dryfsel 1·45.	Percentage Fl. 1·6. Persentasie dryfsel 1·6.	Percentage Ash Fl. 1·6. Persentasie as, dryfsel 1·6.	Sw,. No. Fl. 1·45. Sw.-Syf., dryfsel 1·45	Sw. No., Fl. 1·6. Sw.-Syf., dryfsel. 1·6.
L 48		53	—	2·9	26·7	28·8	41·6	44·8	10·0	69·2	16·5	3	2½
L 49	B	28	—	2·5	38·6	25·6	33·3	30·2	9·0	43·8	15·9	2	2
	A	40½	11·3	3·0	19·8	32·1	45·1	64·6	7·8	80·1	12·2	2½	2½
L 50		33	11·4	2·7	20·1	33·9	43·3	62·6	8·1	80·1	12·7	4	4
L 51	E	34	—	2·3	41·0	24·6	32·1	28·1	8·2	38·3	15·2	2½	1
	D	34	11·3	2·8	20·3	31·9	45·0	59·0	7·2	77·7	12·4	3½	3
	C	13	—	2·3	34·4	27·9	35·4	40·8	8·5	53·1	14·2	2½	2
	B	12	—	2·7	22·6	31·5	43·2	57·9	7·1	72·9	12·2	3½	2½
	A	37	11·5	2·8	19·4	33·1	44·1	65·1	8·2	80·6	11·9	3½	3½
L 52		24½	11·7	2·7	18·3	32·6	46·4	64·4	7·3	80·5	11·0	2½	2
L 67	C	55½	11·1	2·7	21·0	31·5	44·8	58·9	8·0	78·2	13·4	3½	3
	B	10½	—	2·5	25·6	30·9	41·0	53·1	7·2	67·3	12·0	4½	3½
	A	28	—	2·3	27·6	30·8	39·3	43·6	10·4	67·7	16·6	3½	3
L 68	C	5	—	2·1	34·4	27·1	36·4	32·7	8·1	48·3	15·6	3	2½
	B	9	9·0	2·1	34·9	26·7	36·3	30·3	7·9	46·6	14·9	3½	2½
	A	21	—	2·2	31·0	30·4	36·4	43·1	7·9	55·8	13·2	4	2½
L 69	H	16	10·9	2·3	21·8	30·3	45·6	55·0	8·4	74·9	13·0	4½	3½
	G	21	—	2·3	26·0	30·6	41·0	52·9	8·0	66·1	12·3	4	3
	F	49	—	2·2	32·6	26·8	38·4	40·0	7·5	52·4	12·6	3	2½
	E	50	—	2·2	30·7	27·3	39·4	40·9	7·8	56·5	14·3	3½	2½
	D	38	—	2·2	31·7	27·4	38·7	43·0	7·5	55·8	12·8	3	2½
	C	22½	—	2·3	29·0	29·6	39·1	45·6	7·7	61·0	13·3	3	3
	B	16	—	2·2	32·0	28·1	37·5	45·8	7·9	56·9	13·7	3½	2½
	A	13½	—	2·4	25·2	29·7	42·7	52·8	7·3	66·6	11·3	3½	3

F.R.I. Sample Number. Nommer van monster B.-N.-I.		Width ins. Wydte dm.	Cal. Val. lbs./lb. Vw. lbs./lb.	Percentage H_2O. Persentasie H_2O.	Percentage Ash. Persentasie as.	Percentage Vol. Matter. Persentasie vlugbestand.	Percentage fixed Carbon. Persentasie kookskoolstof.	Percentage Fl. 1·45. Persentasie dryfsel 1·45.	Percentage Ash, Fl. 1·45. Persentasie as, dryfsel 1·45.	Percentage Fl. 1·6. Persentasie dryfsel 1·6.	Percentage Ash Fl. 1·6. Persentasie as, dryfsel 1·6.	Sw. No., Fl. 1·45. Sw.-Syf., dryfsel 1·45.	Sw. No., Fl. 1·6. Sw.-Syf., dryfsel 1·6.
L 70	H	16	—	2·3	27·6	30·5	39·6	45·7	8·8	65·0	14·4	3½	2
	G	12½	11·4	2·6	19·5	31·5	46·4	59·7	6·5	76·5	10·8	2½	2
	F	14½	—	2·2	27·6	29·9	40·3	45·8	7·9	64·7	13·3	3	1½
	E	20½	—	2·2	29·0	29·7	39·1	43·2	7·7	59·8	13·7	2½	2½
	D	13	11·0	2·4	21·9	31·5	44·2	55·9	7·3	72·5	12·7	4	2½
	C	25	10·5	2·2	25·5	31·4	40·9	50·5	9·1	71·6	14·6	3½	2
	B	10	—	2·0	32·9	27·7	37·4	38·2	9·3	54·9	15·1	2½	1
	A	7½	11·3	2·3	17·2	34·9	45·6	72·2	6·9	79·4	9·2	4	4
L 71		17	11·5	2·6	18·0	32·9	46·5	68·0	6·9	80·6	9·8	3½	2½
L 72	B	25	—	2·1	33·6	27·0	37·3	36·0	6·6	49·7	12·4	2	1½
	A	31	12·0	2·5	15·6	33·1	48·8	72·6	6·5	82·8	9·0	2½	2
L 73		14	11·6	2·4	18·8	31·5	47·3	70·5	8·3	81·3	11·2	2	1½
L 89	D	26	—	2·4	33·2	20·9	43·5	5·3	9·1	33·0	15·4	1 f	—
	C	5	11·0	2·5	21·5	28·9	47·1	59·5	6·9	70·2	9·0	1½	1
	B	44	—	2·3	29·8	22·2	45·7	23·8	7·5	47·1	13·1	1 f	—
	A	39	11·2	2·4	19·9	29·5	48·2	60·0	5·3	69·9	7·6	2½	1½
L 90		45	—	2·2	36·5	19·3	42·0	7·1	7·1	26·3	14·2	1 f	—
L 91	G	13	—	2·6	26·9	17·3	53·2	17·0	5·1	47·1	9·1	1 p	—
	F	6	9·5	2·7	21·4	20·7	55·2	31·0	4·6	48·2	7·3	1 p	—
	E	53	12·0	3·2	13·2	20·2	63·4	60·6	4·7	82·2	7·2	1 p	—
	D	7	—	2·0	47·1	15·2	35·7	—	—	—	—	—	—
	C	17	10·8	2·6	21·0	19·7	56·7	19·8	7·6	70·3	14·1	1 p	—
	B	153	10·6	2·7	21·2	19·8	56·3	26·7	5·7	65·2	11·3	1 p	—
	A	29	13·2	2·7	7·8	28·8	60·7	79·2	3·7	91·4	5·6	1½	1
L 92	D	39	10·3	2·4	24·5	18·7	54·4	22·9	6·3	61·8	13·2	1 p	—
	C	45	11·4	2·5	18·5	22·2	56·8	48·4	6·3	73·3	9·5	1 f	—
	B	49	11·9	2·5	14·7	23·1	59·7	50·5	6·5	82·9	10·4	1 f	—
	A	20	12·8	2·6	10·9	25·5	61·0	70·4	6·1	92·0	8·9	1	1 f
L 93		62	11·7	2·6	17·0	20·7	59·7	40·4	6·7	80·5	11·4	1 p	—

BOREHOLE 6 : HIEROMTRENT 1359 : BOORGAT 6

Core 3½ in. Kern 3½ dm.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. *Vt.*	*In.* *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
ravel	4	0	4	0	Gruis.
hale, broken	37	0	41	0	Skalie.
hale, soft weathered	27	0	68	0	Skalie, sag verweer.
oal, alternating broad bands of bright and shaly **coal**	1	11	—		**Steenkool,** breë bande glansende en skalieagtige **steenkool** beurtelings.
hale		5	—		Skalie.
hale, carbonaceous, with thin bright **coal** stringers		6	—		Skalie, koolstofhoudend, met dun glansende **steenkooluitlopers.**
oal, finely banded and coaly shale		4	—		**Steenkool,** met dun bande en koolstofhoudende skalie.
oal, alternating broad bands of bright **coal** and coaly shale		8	—		**Steenkool,** breë bande **glanskool** en koolstofhoudende skalie.
hale, carbonaceous, with thin **coal** stringers	1	5	—		Skalie, koolstofhoudend, met dun **steenkooluitlopers.**
oal (broken core)		6	—		**Steenkool** (gebreekte kern).
hale		6	—		Skalie.
ale, carbonaceous, with thin **coal** stringers		11	78	0	Skalie, koolstofhoudend met dun **steenkooluitlopers.**
ale, black	1	0	79	0	Skalie, swart.
al, finely bright banded	1	11	—		**Steenkool,** dun glansend gestreep.
ale		2	—		Skalie.
al, alternating bright **coal** and coaly shale (bright coal predominating)	4	7	—		**Steenkool, glanskool** en koolstofhoudende skalie beurtelings (**glanskool** oorheersend).
ale, carbonaceous, with bright **coal** stringers	2	1	—		Skalie, koolstofhoudend, met **glanskooluitlopers.**
al, bright with a little shaly **coal**		11	—		**Steenkool,** glansend met 'n bietjie skalieagtige **steenkool.**
ale		2	—		Skalie.
al, bright with a little shaly **coal.**	1	1	—		**Steenkool,** glansend met 'n bietjie skalieagtige **steenkool.**
ale, carbonaceous with **coal** stringers	1	0	94	3	Skalie, koolstofhoudend met **steenkooluitlopers.**
ale, black	3	0	97	3	Skalie, swart.
al, very bright	1	7	—		**Steenkool,** baie glansend.
ale		5	—		Skalie.
al, very bright		7	—		**Steenkool,** baie glansend.
ale, carbonaceous		1	—		Skalie, koolstofhoudend.
al, very bright		4	100	3	**Steenkool,** baie glansend.
ale, black	5	6	105	9	Skalie, swart.
al, bright, with a few shale bands	1	5	—		**Steenkool,** glansend, met 'n paar skaliebande.
ale, carbonaceous		2	—		Skalie, koolstofhoudend.
al, very bright	3	6	—		**Steenkool,** baie glansend.
ale		4	—		Skalie.
al, very bright		4	—		**Steenkool,** baie glansend.
ale, carbonaceous		3	—		Skalie, koolstofhoudend.
al, very bright		4	—		**Steenkool,** baie glansend.
ale		4	—		Skalie.
al, very bright with pyritic nodules	2	1	—		**Steenkool,** baie glansend met piritiese klonte.
ale		2	—		Skalie.
rites band		3	—		Pirietband.
al, bright	2	2	—		**Steenkool,** glansend.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. Vt.	*In. Dm.*	*Ft. Vt.*	*In. Dm.*	
Shale, with occasional **coal** stringer at top	1	3	118	4	Skalie, met 'n enkele **steenkooluitloper** bo-aan.
Shale, black	5	8	124	0	Skalie, swart.
Shale and coal, bright, shale predominating	2	5	—		Skalie en steenkool, glansend, skalie oorheersend.
Coal, bright and shale mixed	1	10	—		**Steenkool,** glansend en skalie gemeng.
Shale		2	—		Skalie.
Coal and shale mixed		5	—		**Steenkool** en skalie gemeng.
Shale		11	—		Skalie.
Coal, bright		5	—		**Steenkool,** glansend.
Shale, carbonaceous		3	—		Skalie, koolstofhoudend.
Coal, bright		2	—		**Steenkool,** glansend.
Shale, carbonaceous		1	—		Skalie, koolstofhoudend.
Coal, bright		2	—		**Steenkool,** glansend.
Shale, carbonaceous		3	—		Skalie, koolstofhoudend.
Coal, bright		2	—		**Steenkool,** glansend.
Shale, carbonaceous		4	—		Skalie, koolstofhoudend.
Coal, very bright	1	5	—		**Steenkool,** baie glansend.
Shale, carbonaceous		4	—		Skalie, koolstofhoudend.
Coal, bright		1	—		**Steenkool,** glansend.
Shale, carbonaceous		6	—		Skalie, koolstofhoudend.
Coal, very bright		11	—		**Steenkool,** baie glansend.
Shale, carbonaceous		4	—		Skalie, koolstofhoudend.
Coal, very bright		3	—		**Steenkool,** baie glansend.
Shale, carbonaceous	1	1	—		Skalie, koolstofhoudend.
Coal, mixed	1	7	—		**Steenkool,** gemeng.
Coal, very bright	1	11	—		**Steenkool,** baie glansend.
Shale, carbonaceous	1	3	—		Skalie, koolstofhoudend.
Coal, cubical, bright, and shale carbonaceous	3	3	144	6	**Steenkool,** kubies, glansend, en skalie koolstofhoudend.
Cavity	2	3	146	9	Holte.
Shale, carbonaceous		1	—		Skalie, koolstofhoudend.
Coal, bright with shale bands	1	1	—		**Steenkool,** glansend met skaliebande.
Shale		2	—		Skalie.
Coal, bright with shale bands		2	—		**Steenkool,** glansend met skaliebande.
Shale		4	—		Skalie.
Coal, bright, with shale bands		3	—		**Steenkool,** glansend met skaliebande.
Shale, carbonaceous and **coal** bands	1	1	—		Skalie, koolstofhoudend en **steenkoolbande.**
Coal, bright, with shale bands		9	—		**Steenkool,** glansend, met skaliebande.
Shale, carbonaceous		3	—		Skalie, koolstofhoudend.
Coal, bright, with shale bands		6	—		**Steenkool,** glansend, met skaliebande.
Shale		5	—		Skalie.
Coal, bright, with shale bands		10	—		**Steenkool,** glansend, met skaliebande.
Shale, with coal stringers		11	—		Skalie, met steenkooluitlopers.
Coal, bright, with shale bands		10	—		**Steenkool,** glansend, met skaliebande.
Shale		7	—		Skalie.
Coal, bright, with shale bands		4	—		**Steenkool,** glansend, met skaliebande.
Shale		4	—		Skalie.
Coal, bright, with shale bands		8	—		**Steenkool,** glansend, met skaliebande.
Shale		3	—		Skalie.
Coal, bright, with shale bands		8	157	3	**Steenkool,** glansend, met skaliebande.
Shale with four 3″ **coal** bands	8	2	165	5	Skalie met vier 3″ **steenkoolbande.**

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. *Vt.*	*In.* *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
Coal, bright and shaly, alternating	1	7	—		**Steenkool,** glansend en skalieagtig, beurtelings.
Shale, carbonaceous		8	—		Skalie, koolstofhoudend.
Coal, very bright		10	—		**Steenkool,** baie glansend.
Coal, very bright, very pyritic		10	—		**Steenkool,** baie glansend, baie pirities.
Shale with 2 thin bands of **coal**	1	3	—		Skalie met 2 dun bande **steenkool.**
Coal, bright		8	—		**Steenkool,** glansend.
Shale, carbonaceous, and bright **coal.**	1	10	—		Skalie, koolstofhoudend, en **glanskool.**
Shale, carbonaceous, with four 2″ bright **coal** bands	2	0	—		Skalie, koolstofhoudend, met vier 2″ **glanskoolbande.**
Coal, bright, and shale, pyritic	1	10	—		**Steenkool,** glansend, en skalie, pirities.
Shale		7	—		Skalie.
Coal band, pyritic		8	178	2	**Steenkoolband,** pirities.
Shale, shaly **coal,** with a few coal stringers	14	8	192	10	Skalie, skalieagtige **steenkool,** met 'n paar steenkooluitlopers.
Coal, bright, pyritic		6	—		**Steenkool,** glansend, pirities.
Shale		2	—		**Skalie.**
Coal, bright, pyritic		3	193	9	**Steenkool,** glansend, pirities.
Coal and shale (shale predominating)	5	5	199	2	**Steenkool** en skalie (skalie oorheersend)
Coal, mixed bright, and coaly shale	1	4	—		**Steenkool,** gemeng, glansend, en koolstofhoudende skalie.
Shale, sandy	2	0	—		Skalie, sanderig.
Coal, bright cubical		8	—		**Steenkool,** glansend, kubies.
Shale, carbonaceous		5	—		Skalie, koolstofhoudend.
Coal, bright cubical		6	—		**Steenkool,** glansend, kubies.
Shale, carbonaceous, and **coal** bands		3	—		Skalie, koolstofhoudend, en **steenkoolbande.**
Coal, bright, cubical		3	204	6	**Steenkool,** glansend, kubies.
Shale, carbonaceous, with thin **coal bands**	9	7	214	1	Skalie, koolstofhoudend, met dun **steenkoolbande.**
Coal, bright, and shaly **coal**		10	—		**Steenkool,** glansend, en skalieagtige **steenkool.**
Shale, carbonaceous		2	—		Skalie, koolstofhoudend.
Coal, bright and shaly **coal**		3	215	4	**Steenkool,** glansend en skalieagtige **steenkool.**
Shale, carbonaceous, and few **coal** bands	5	2	220	6	Skalie, koolstofhoudend, en min **steenkoolbande.**
Coal, shaly		8	—		**Steenkool,** skalieagtig.
Sandstone, shaly		1	—		Sandsteen, skalieagtig.
Coal, mainly bright	1	6	222	9	**Steenkool,** hoofsaaklik glansend.
Shale, black, with a few 4″ **coal** bands	7	3	230	0	Skalie, swart, met 'n paar 4″ **steenkoolbande.**
Coal, mainly bright, pyritic	1	0	231	0	**Steenkool,** hoofsaaklik glansend, pirities.
Shale, black with two 4″ **coal** bands	4	0	235	0	Skalie, swart, met twee 4″ **steenkoolbande.**
Coal shaly, with bright bands		5	—		**Steenkool,** skalieagtig, met glansende bande.
Sandstone, shaly		1	—		Sandsteen, skalieagtig.
Coal, shaly, with bright bands		2	—		**Steenkool,** skalieagtig, met glansende bande.
Shale, carbonaceous		5	—		Skalie, koolstofhoudend.
Coal, shaly, with bright bands	1	0	—		**Steenkool,** skalieagtig, met glansende bande.
Coal, bright, with shale stringers		8	237	9	**Steenkool,** glansend, met skalieuitlopers.
Shale, black carbonaceous, with a few **coal** bands	8	3	246	0	Skalie, swart koolstofhoudend, met 'n paar **steenkoolbande**

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. Vt.	*In. Dm.*	*Ft. Vt.*	*In. Dm.*	
Coal, bright, pyritic		8	—		**Steenkool,** glansend pirities.
Shale, carbonaceous		2	—		Skalie, koolstofhoudend.
Coal, bright		4	—		**Steenkool,** glansend.
Shale, carbonaceous		11	—		Skalie, koolstofhoudend.
Coal, very bright, pyritic		8	248	9	**Steenkool,** baie glansend, pirities.
Shale, carbonaceous with a few 3″ **coal** bands	9	3	258	0	Skalie, koolstofhoudend met 'n paar 3″ **steenkoolbande.**
Shale, carbonaceous, and shaly dull **coal**	7	6	265	6	Skalie, koolstofhoudend, en skalieagtige dof **steenkool.**
Shale, sandy	1	0	266	6	Skalie, sanderig.
Coal, bright		3	—		**Steenkool,** glansend.
Coal, mixed		4	—		**Steenkool,** gemeng.
Shale and sandstone		3	—		Skalie en sandsteen.
Coal, bright		2	—		**Steenkool,** glansend.
Shale and shaly **coal**	1	2	—		Skalie en skalieagtige **steenkool.**
Coal, dull	1	5	—		**Steenkool,** dof.
Sandstone, laminated		6	—		Sandsteen, fyngelaag.
Coal, mainly bright		4	—		**Steenkool,** hoofsaaklik glansend.
Shale, carbonaceous		—	—		Skalie, koolstofhoudend.
Coal, mainly bright	1	1	—		**Steenkool,** hoofsaaklik glansend.
Coal, mixed, mainly dull		8	—		**Steenkool,** gemeng, hoofsaaklik dof.
Shale		1	—		Skalie.
Shale, carbonaceous, with bright bands		4	—		Skalie, koolstofhoudend, met glansende bande.
Coal, dull, with a little bright **coal**	1	9	—		**Steenkool,** dof, met 'n bietjie **glanskool.**
Shale, carbonaceous		3	—		Skalie, koolstofhoudend.
Coal, mixed	1	2	277	7	**Steenkool,** gemeng.
Shale, carbonaceous, with a few **coal** bands	9	7	287	2	Skalie, koolstofhoudend, met 'n paar **steenkoolbande.**
Coal, very bright (white stained)		8	287	10	**Steenkool**, baie glansend (wit gevlek).
Sandstone, banded, shaly	4	7	292	5	Sandsteen, gestreep, skalieagtig.
Coal, dull	1	2	—		**Steenkool,** dof.
Shale, carbonaceous		5	—		Skalie, koolstofhoudend.
Coal, dull		3	—		**Steenkool,** dof.
Shale, carbonaceous		3	—		Skalie, koolstofhoudend.
Coal, mainly dull, pyritic	1	2	—		**Steenkool,** hoofsaaklik dof, pirities.
Coal, shaly	1	3	296	11	**Steenkool,** skalieagtig.
Shale, brownish black	14	1	311	0	Skalie, bruinagtig-swart.
Shale, carbonaceous	1	0	312	0	Skalie, koolstofhoudend.
Coal, shaly		9	—		**Steenkool,** skalieagtig.
Coal, dull, granular		4	—		**Steenkool,** dof, korrelrig.
Coal, mainly dull	1	0	—		**Steenkool,** hoofsaaklik dof.
Shale and shaly **coal**		6	—		Skalie en skalieagtige **steenkool.**
Coal, mixed, mainly dull	1	3	—		**Steenkool,** gemeng, hoofsaaklik dof.
Sandstone, shaly		4	—		Sandsteen, skalieagtig.
Coal, mainly dull, non-banded, with occasional thin bright bands	10	0	—		**Steenkool,** hoofsaaklik dof, niegestreep, met dun glansende bande hier en daar.
Coal, dull	7	6	—		**Steenkool,** dof.
Coal, muddy		2	—		**Steenkool,** modderig.
Coal, mainly bright, duller at top	5	4	339	0	**Steenkool,** hoofsaaklik glanend, dowwer aan top.
Sandstone, banded, shaly	9	9	348	9	Sandsteen, gestreep, skalieagtig.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. Vt.	*In. Dm.*	*Ft. Vt.*	*In. Dm.*	
Coal and shale	2	3	351	0	**Steenkool** en skalie.
Coal, mainly dull, with thin bright bands, bright at bottom	1	6	—		**Steenkool,** hoofsaaklik dof, met dun glansende bande, glansend aan bodem.
Coal, non-banded, dull	3	0	—		**Steenkool,** nie-gestreep, dof.
Pyrites		1	—		Piriet.
Coal, dull with occasional thin bright bands	2	6	—		**Steenkool,** dof met dun glansende bande hier en daar.
Shale		1	—		Skalie.
Coal, dull	3	0	—		**Steenkool,** dof.
Sandstone and coal		6	—		Sandsteen en steenkool.
Coal, mixed, and dull bands	2	8	264	6	**Steenkool,** gemeng, en dun bande.
Sandstone, medium-grained	15	0	379	6	Sandsteen, middelkorrelrig.
Sandstone, banded, shaly	35	1	—		Sandsteen, gestreep, skalieagtig.
Coal, dull, non-banded	3	4	—		**Steenkool,** dof, nie-gestreep.
Coal, mainly dull	2	6	420	7	**Steenkool,** hoofsaaklik dof.
Sandstone, banded, shaly	34	5	455	0	Sandsteen, gestreep, skalieagtig.

BOREHOLE 6 : HIEROMTRENT 1359 : BOORGAT 6

F.R.I. Sample No. No. van monster B.-N.-I.	Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.		Aard van lae.
		In. Dm.	*Ft. Vt.*	*In. Dm.*	
L 94	Roof	—	68	0	Dak.
E	Alternating broad bands of bright **coal** and shaly **coal**	23	—		Breë bande **glanskool** en skalieagtige **steenkool** om die beurt.
	Shaly sandstone, **N.S.**	5	—		Skalieagtige sandsteen, **N.G.**
	Carbonaceous shale with thin bright **coal** stringers, **N.S.**	6	—		Koolstofhoudende skalie met dun **glanskooluitlopers, N.G.**
D	Finely banded bright **coal and coaly** shale	4	—		Fyn gebande **glanskool** en steenkoolagtige skalie.
C	Alternating broad bands of bright **coal** and coaly shale	34	—		Breë bande **glanskool** en koolstofhoudende skalie om die beurt.
B	Finely banded bright **coal** and coaly shale	8	—		Fyn gebande **glanskool** en koolstofhoudende skalie.
	Carbonaceous shale with thin **coal** stringers (stony at top), **N.S.**	17	—		Koolstofhoudende skalie met dun **steenkooluitlopers** (klipperig bo-aan), **N.G.**
A	**Coal** (broken core)	6	—		**Steenkool** (gebreekte kern)
	Shale, **N.S.**	6	—		Skalie, **N.G.**
	Carbonaceous shale with thin **coal** stringers	11	78	0	Koolstofhoudende skalie met dun **steenkooluitlopers, N.G.**

F.R.I. Sample No. No. van monster B.-N.-I.	Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.		Aard van lae.
		In. *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
L 95	—	—	79	0	—
C	Finely banded bright **coal**	23	—		Fyn gebande **glanskool.**
	Shaly sandstone, **N.S.**	2	—		Skalieagtige sandsteen, **N.G.**
B	Alternating bright **coal** and coaly shale (bright **coal** predominating) 2″ carbonaceous shale 7″ from top excluded	55	—		**Glanskool** en skalieagtige **steenkool** om die beurt (**glanskool** oorheersend) 2″ koolstofhoudende skalie 7″ van bo uitgeslote.
	Carbonaceous shale with bright coal stringers, **N.S.**	25	—		Koolstofhoudende skalie met **glanskool** uitlopers, **N.S.**
	Bright **coal** with a little shaly coal	11	—		**Glanskool** met 'n bietjie skalieagtige steenkool.
A	Shaly sandstone, **N.S.**	2			Skalieagtige sandsteen, **N.G.**
	Bright **coal** with a little shaly coal	13	—		**Glanskool,** met 'n bietjie skalieagtige steenkool.
	Carbonaceous shale with **coal** stringers, **N.S.**	12	94	3	Koolstofhoudende skalie met **steenkooluitlopers, N.S.**
	N.B. 40″ missing.				**N.B.** 40″ vermis.
L 96	—	—	97	3	—
	Very bright **coal**	19	—		**Steenkool,** baie glansend.
	Shaly sandstone, **N.S.**	5	—		Skalieagtige sandsteen, **N.G.**
	Very bright **coal**	7	—		**Steenkool,** baie glansend.
	Carbonaceous shale, **N.S.**	1	—		Koolstofhoudende skalie, **N.G.**
	Very bright **coal**	4	100	3	**Steenkool,** baie glansend.
L 97	—	—	105	9	—
E	Bright **coal** with a few shale bands	17	—		**Glanskool** met 'n paar skaliebande.
	Carbonaceous shale, **N.S.**	2	—		Koolstofhoudende skalie, **N.G.**
D	Very bright **coal**	42	—		**Steenkool,** baie glansend.
	Shaly sandstone, **N.S.**	4	—		Skalieagtige sandsteen, **N.G.**
	Very bright **coal**	4	—		**Steenkool,** baie glansend.
C	Carbonaceous shale with slip plane, **N.S.**	3	—		Koolstofhoudende skalie met glyvlak, **N.G.**
	Very bright **coal**	4	—		**Steenkool,** baie glansend.
	Shaly sandstone, **N.S.**				Skalieagtige sandsteen, **N.G.**
B	Very bright **coal** with pyritic nodules	25	—		**Steenkool,** baie glansend met pirietklonte.
	Shale, **N.S.**	2	—		Skalie, **N.G.**
	Pyrites band, **N.S.**	3	—		Pirietband, **N.G.**
A	Bright **coal**	26	—		**Glanskool.**
	Shale with occasional **coal** stringer at top, **N.S.**	15	118	4	Skalie met **steenkooluitloper** hier en daar bo-aan, **N.G.**
L 98	—	—	124	0	—
	Shale and bright coal, **N.S.**	3	—		Skalie en glanskool, **N.G.**
	Shale, **N.S.**	12	—		Skale, **N.G.**
	Bright **coal,** shaly at top, **N.S.**	3	—		**Glanskool,** skalieagtig bo-aan, **N.G.**

F.R.I. Sample No. No. van monster B.-N.-I.	Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.	Aard van lae.
L 98		*In.* *Dm.*	*Ft. In.* *Vt. Dm.*	
	Shale, **N.S.**	2	—	Skalie, **N.G.**
E	Bright **coal** and shale mixed	7	—	**Glanskool** en skalie gemeng.
	Shale, **N.S.**	2	—	Skalie, **N.G.**
	Bright **coal** and shale mixed	22	—	**Glanskool** en skalie gemeng.
	Shale, **N.S.**	2	—	Skalie, **N.G.**
	Bright **coal** and shale mixed	5	—	**Glanskool** en skalie gemeng.
	Shale, **N.S.**	11	—	Skalie, **N.G.**
D	Very bright **coal** (smithy-looking pyritic)	5	—	**Steenkool,** baie glansend (lyk na smidskool, pirities)
	Carbonaceous shale, **N.S.**	3	—	Koolstofhoudende skalie, **N.G.**
	Very bright **coal** (smithy-looking, pyritic)	2	—	**Steenkool,** baie glansend (lyk na smidskool, pirities)
	Carbonaceous shale, **N.S.**	1	—	Koolstofhoudende skalie, **N.G.**
	Very bright **coal** (smithy-looking, pyritic)	2	—	**Steenkool,** baie glansend (lyk na smidskool, pirities)
	Carbonaceous shale, **N.S.**	3	—	Koolstofhoudende skalie, **N.G.**
	Very bright **coal** (smithy-looking, pyritic)	2	—	**Steenkool,** baie glansend (lyk na smidskool, pirities)
	Carbonaceous shale, **N.S.**	4	—	Koolstofhoudende skalie, **N.G.**
	Very bright **coal** (smithy-looking, pyritic)	17	—	**Steenkool,** baie glansend (lyk na smidskool, pirities)
	Carbonaceous shale, **N.S.**	4		Koolstofhoudende skalie, **N.G.**
	Very bright **coal** (smithy-looking pyritic)	1	—	**Steenkool,** baie glansend (lyk na smidskool, pirities).
	Carbonaceous shale, **N.S.**	6	—	Koolstofhoudende skalie, **N.G.**
	Very bright **coal** (smithy-looking, pyritic)	11	— —	**Steenkool,** baie glansend (lyk na smidskool, pirities)
	Carbonaceous shale, **N.S.**	4	—	Koolstofhoudende skalie, **N.G.**
	Very bright **coal** (smithy-looking, pyritic)	3	—	**Steenkool,** baie glansend (lyk na smidskool. pirities).
	Carbonaceous shale, **N.S.**	13	—	Koolstofhoudende skalie, **N.G.**
C	Mixed **coal**	19	—	Gemengde **steenkool.**
B	Very bright **coal**	23	—	**Steenkool,** baie glansend.
	Carbonaceous shale, **N.S.**	15	—	Koolstofhoudende skalie, **N.G.**
A	Cubical bright **coal** and carbonaceous shale	39	144 6	**Glanskool,** kubies, en koolstofhoudende skalie.
L 99	—	—	146 9	—
	Carbonaceous shale, **N.S.**	1	—	Koolstofhoudende skalie, **N.G.**

F.R.I. Sample No. No. van monster B.-N.-I.	Nature of Strata.	Thickness Recovered. Dikte verkry. *In. Dm.*	True Depth. Ware diepte. *Ft. In. Vt. Dm.*	Aard van lae.
L 99 C	Bright **coal** with shale bands	13	—	**Glanskool,** met skaliebande.
	Shale, **N.S.**	2	—	Skalie, **N.G.**
	Bright **coal** with shale bands	2	—	**Glanskool** met skaliebande.
	Shale, **N.S.**	4	—	Skalie, **N.G.**
	Bright **coal** with shale bands	3	—	**Glanskool,** met skaliebande.
	Shale, **N.S.**	6	—	Skalie, **N.G.**
	Carbonaceous shale with bright **coal** bands, **N.S.**	7	—	Koolstofhoudende skalie met **glanskoolbande, N.G.**
B	Bright **coal** with shale bands	9	—	**Glanskool** met skaliebande.
	Carbonaceous shale, **N.S.**	3		Koolstofhoudende skalie, **N.G.**
	Bright **coal** with shale bands	6	—	**Glanskool** met skaliebande.
	Shale, **N.S.**	5		Skalie, **N.G.**
	Bright **coal** with shale bands	10	—	**Glanskool** met skaliebande.
	Shale with fine bright coal stringers, **N.S.**	11	—	Skalie met fyn glanskooluitlopers, **N.G.**
A	Bright **coal** with shale bands	10	—	**Glanskool,** met skaliebande.
	Shale, **N.S.**	7	—	Skalie, **N.G.**
	Bright **coal** with shale bands	4	—	**Glanskool** met skaliebande.
	Shale, **N.S.**	4	—	Skalie, **N.G.**
	Bright **coal** with shale bands	8	—	**Glanskool** met skaliebande.
	Shale, **N.S.**	3	—	Skalie, **N.G.**
	Bright **coal,** pyritic, with shale bands	8	157 3	**Glanskool,** pirities, **met** skaliebande.
L 100	—	—	165 5	—
E	Alternating bands of bright **coal** and shaly **coal**	19	—	Glasende en skalieagtige **steenkoolbande** om die beurt.
	Carbonaceous shale, **N.S.**	8	—	Koolstofhoudende skalie, **N.G.**
D	Very bright **coal**	10	—	**Steenkool,** baie glansend.
C	Bright, very pyritic **coal**	10	—	**Steenkool,** glansend, baie pirities.
	Shale with 2 thin bands of bright coal, **N.S.**	15	—	Skalie met 2 dun bande glanskool, **N.G.**
B	Bright **coal**	8	—	**Glanskool.**
	Carbonaceous shale, **N.S.**	1	—	Koolstofhoudende skalie, **N.G.**
	Bright **coal**	1	—	**Glanskool.**
	Carbonaceous shale, **N.S.**	2	—	Koolstofhoudende skalie, **N.G.**
	Bright **coal**	4	—	**Glanskool.**
	Carbonaceous shale, **N.S.**	3	—	Koolstofhoudende skalie, **N.G.**
	Bright **coal**	2	—	**Glanskool.**
	Carbonaceous shale, **N.S.**	1	—	Koolstofhoudende skalie, **N.G.**
	Bright **coal**	5	—	**Glanskool.**
	Carbonaceous shale, **N.S.**	1	—	Koolstofhoudende skalie, **N.G.**
	Bright **coal**	2	—	**Glanskool.**

F.R.I. Sample No. No. van monster B.-N.-I.	Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.	Aard van lae.
L 100		*In.* *Dm.*	*Ft. In.* *Vt. Dm.*	
	Carbonaceous shale with four 2″ bright **coal** bands, **N.S.**	24	—	Koolstofhoudende skalie met vier 2″ **glanskoolbande, N.G.**
A	Bright **coal** and shale, pyritic 4″ carbonaceous shale excluded	22	—	**Glanskool** en skalie, pirities, 4″ koolstofhoudende skalie uitgeslote.
	Shale, **N.S.**...........	7	—	Skalie, **N.G.**
	Pyritic **coal** band, **N.S.**	8	—	Piritiese **steenkoolband, N.G.**
	Shale, **N.S.**...........	4	178 6	Skalie, **N.G.**
L 101	—	—	191 0	—
	Carbonaceous shale and shaly **coal, N.S.**	12	—	Koolstofhoudende skalie en skalieagtige **steenkool, N.G.**
	Carbonaceous shale with a few bright **coal** stringers, **N.S.**	10	—	Koolstofhoudende skalie met 'n paar **glanskooluitlopers, N.G.**
	Bright **coal,** pyritic....	6	—	**Glanskool,** pirities.
	Shale, **N.S.**...........	2	—	Skalie, **N.G.**
	Bright **coal,** pyritic....	3	—	**Glanskool,** pirities.
	Shale, **N.S.**..........	9	194 6	Skalie, **N.G.**
L 102	—	—	197 0	—
	Carbonaceous shale with bands of bright **coal, N.S.**	26	—	Koolstofhoudende skalie met **glanskoolbande, N.G.**
B	Mixed bright **coal** and coaly shale	16	—	**Glanskool** en steenkoolagtige skalie gemeng.
	Sandy shale, **N.S.**.....	24	—	Sanderige skalie, **N.G.**
	Bright cubical **coal**....	8	—	Glansende kubiese **steenkool.**
	Carbonaceous shale, pyritic, **N.S.**	5		Koolstofhoudende skalie, pirities, **N.G.**
	Bright cubical **coal**...	6	—	Glansende kubiese **steenkool.**
A	Carbonaceous shale with with thin bands of **coal, N.S.**	2½	—	Koolstofhoudende skalie met dun **steenkoolbande, N.G.**
	Bright cubical **coal**....	3	204 6	Glansende kubiese **steenkool.**
L 103	—	—	211 8	—
	Carbonaceous shale with very thin bands of **coal** and occasionally a few inches of **coal, N.S.**	24	—	Koolstofhoudende skalie met baie dun bande **steenkool** en hier en daar 'n paar duim **steenkool, N.G.**
	Shaly sandstone **N.S.**..	4	—	Skalieagtige sandsteen, **N.G.**
	Carbonaceous shale, **N.S.**	1	—	Koolstofhoudende skalie, **N.G.**
	Bright **coal** and shaly **coal**	10	—	**Glanskool** en skalieagtige **steenkool.**
	Carbonaceous shale, **N.S.**	2	—	Koolstofhoudende skalie, **N.G.**
	Bright **coal** and shaly **coal**	3	—	**Glanskool** en skalieagtige **steenkool.**
	Carbonaceous shale with a few bright bands at bottom, **N.S.**	14	—	Koolstofhoudende skalie met 'n paar glansende bande onderaan **N.G.**

F.R.I. Sample No. No. van monster B.-N.-I.	Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.		Aard van lae.
		In. Dm.	*Ft. Vt.*	*In. Dm.*	
L 103	Bright **coal, N.S.**	2	—		**Glanskool, N.G.**
	Carbonaceous shale, **N.S.**	4	217	0	Koolstofhoudende skalie, **N.G.**
L 104	—	—	220	6	—
B	Shaly **coal**	8	—		Skalieagtige **steenkool.**
	Shaly sandstone, **N.S.**	1	—		Skalieagtige sandsteen, **N.G.**
A	Mainly bright **coal.**	18	222	9	Hoofsaaklik **glanskool.**
L 105	—	—	230	0	—
	Mainly bright cubical **coal,** pyritic	12	231	0	Hoofsaaklik glansende kubiese **steenkool,** pirities.
L 106	—	—	235	0	—
	Shaly **coal** with bright bands	5	—		Skalieagtige **steenkool,** met glansende bande.
	Shaly sandstone, **N.S.**	1	—		Skalieagtige sandsteen, **N.G.**
	Shaly **coal** with bright bands	2	—		Skalieagtige **steenkool** met glansende bande.
	Carbonaceous shale, **N.S.**	5	—		Koolstofhoudende skalie, **N.G.**
	Shaly **coal** with thin bright bands	12	—		Skalieagtige **steenkool** met dun glansende bande.
	Bright **coal** with shale stringers	8	—		**Glanskool** met skalie uitlopers.
	Carbonaceous shale with 3 bands of 1″ bright **coal, N.S.**	48	—		Koolstofhoudende skalie met 3 bande van 1″ **glanskool, N.G.**
	Carbonaceous shale and **coal,, N.S.**	6	242	3	Koolstofhoudende skalie en **steenkool, N.G.**
L 107	—	—	246	0	—
	Very bright, pyritic **coal,** smithy-like	8	—		**Steenkool,** baie glansend, pirities, smidsteenkoolagtig.
	Carbonaceous shale, **N.S.**	2	—		Koolstofhoudende skalie, **N.G.**
	Very bright, pyritic, smithy-like **coal**	4	—		Baie glansende **steenkool,** pirities, smidsteenkoolagtig.
	Carbonaceous shale, **N.S.**	11	—		Koolstofhoudende skalie, **N.G.**
	Very bright **coal,** pyritic smithy-like	8	—		Baie glansende **steenkool,** pirities, smidsteenkoolagtig.
	Carbonaceous shale, **N.S.**	4	—		Koolstofhoudende skalie, **N.G.**
L 107	Friable, wet, muddy-looking band of **coal N.S.**	3	249	4	Krummelrig, nat, modderige band **steenkool, N.G.**
L 108	—	—	258	0	—
E	Carbonaceous shale and shaly dull **coal**	90	—		Koolstofhoudende skalie en skalieagtige dowwe **steenkool.**
	Sandy shale, **N.S.**	12	—		Sanderige skalie, **N.G.**

F.R.I. Sample No. No. van monster B.-N.-I.	Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.	Aard van lae.
L 108		*In.* *Dm.*	*Ft. In.* *Vt. Dm.*	
	Bright **coal**...........	3	—	**Glanskool.**
	Mixed **coal**...........	4	—	Gemengde **steenkool.**
D	Shale with sandstone bands, **N.S.**	3	—	Skalie met sandsteenbande, **N.G.**
	Bright, pyritic **coal**....	2	—	Glansende, piritiese **steenkool.**
	Shale and shaly **coal, N.S.**	14	—	Skalie en skalieagtige **steenkool, N.G.**
C	Dull **coal**.............	17	—	Dowwe **steenkool.**
	Laminated sandstone, **N.S.**	6	—	Fyngelaagde sandsteen, **N.G.**
B	Mainly bright **coal**...	4	—	Hoofsaaklik **glanskool.**
	Carbonaceous shale, **N.S.**	6	—	Koolstofhoudende skalie **N.G.**
	Mixed, mainly bright **coal**	13	—	Gemeng, hoofsaaklik **glanskool.**
	Mixed mainly dull **coal**	8	—	Gemeng, hoofsaaklik dowwe **steenkool.**
	Sandstone, **N.S.**........	1	—	Sandsteen, **N.G.**
A	Carbonaceous shale with bright bands, **N.S.**	4	—	Koolstofhoudende skalie met glansende bande, **N.G.**
	Dull **coal** with a little bright **coal**	21	—	Dowwe **steenkool** met 'n bietjie **glanskool.**
	Carbonaceous shale, **N.S.**	3	—	Koolstofhoudende skalie, **N.G.**
	Mixed **coal**...........	14	—	Gemengde **steenkool.**
	Carbonaceous shale, **N.S.**	7	278 2	Koolstofhoudende skalie, **N.G.**
L 109	—	—	285 6	—
	Carbonaceous shale, **N.S.**	20	—	Koolstofhoudende skalie, **N.G.**
	Very bright **coal,** white-stained (1″ pyrites band excluded)	8	287 10	**Steenkool,** baie glansend, wit gevlek (1″ pirietband uitgeslote).
L 110	—	—	292 5	—
	Dull **coal**.............	14	—	Dowwe **steenkool.**
	Carbonaceous shale, **N.S.**	5	—	Koolstofhoudende skalie, **N.G.**
	Dull **coal**.............	3	—	Dowwe **steenkool.**
	Carbonaceous shale, **N.S.**	3	—	Koolstofhoudende skalie, **N.G.**
	Mainly dull, pyritic **coal**	14	—	Hoofsaaklik dowwe, piritiese **steenkool.**
	Shaly **coal, N.S.**........	15	296 11	Skalieagtige **steenkool, N.G.**
L 111	—	—	311 0	—
	Carbonaceous shale, **N.S.**	12	—	Koolstofhoudende **N.G.**
E	Shaly **coal**...........	9	—	Skalieagtige **steenkool.**
	Dull granular **coal**.....	4	—	Dowwe korrelrige **steenkool.**
	Mainly dull **coal**......	12	—	Hoofsaaklik dowwe **steenkool.**
D	Shale and shaly **coal, N.S.**	6	—	Skalie en skalieagtige **steenkool, N.G.**
	Mixed, mainly dull **coal**	15	—	Gemeng, hoofsaaklik dowwe **steenkool.**
	Shaly sandstone, **N.S.**..	4	—	Skalieagtige sandsteen, **N.G.**

F.R.I. Sample No. No. van monster B.-N.-I.	Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.		Aard van lae.
		In. *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
L 111					
C	Mainly dull non-banded **coal,** with occasional thin bright bands (1″ pyrites 28″ from top excluded)	120	—		Hoofsaaklik dowwe niegebande **steenkool** met dun glansende bande hier en daar (1″ piriet 28″ van bo uitgeslote)
B	Dull **coal** with lustre	90	—		Dowwe **steenkool** met glans.
	Muddy and wet **coal** band, **N.S.**	2	—		Modderige en nat **steenkoolband, N.G.**
A	Mainly bright **coal,** duller at top	64	339	0	Hoofsaaklik **glanskool,** dowwer bolangs.
L 112	—	—	351	0	—
E	Mainly dull **coal** with thin bright bands (mainly bright at bottom) ½″ shale excluded)	18	—		Hoofsaaklik dowwe **steenkool** met dun glansende bande (hoofsaaklik glansend onderlangs) ½″ skalie uitgeslote.
D	Non-banded dull **coal**	36	—		Nie-gebande dowwe **steenkool.**
	Pyrites, **N.S.**..........	1	—		Piriet, **N.G.**
C	Dull **coal** with occasional thin bright bands	30	—		Dowwe **steenkool** met dun glansende bande hier en daar.
	Shale, **N.S.**...........	½	—		Skalie, **N.G.**
B	Dull **coal**.............	36	—		Dowwe **steenkool.**
	Carbonaceous sandstone and **coal, N.S.**	6	—		Koolstofhoudende sandsteen en **steenkool, N.G.**
A	Alternating mixed and dull bands of **coal**	32	364	6	Beurtelings gemende en dowwe **steenkoolbande.**
L 113	—	—	414	9	—
B	Dull, non-banded **coal**	40	—		Dowwe nie-gebande **steenkool.**
A	Mainly dull **coal,** occasional finely-banded mixed bands of **coal**	30	—		Hoofsaaklik dowwe **steenkool,** fyngestreepte gemengde **steenkool** hier en daar.
	Floor...............	—	420	7	Vloer.

BOREHOLE 6: HIEROMTRENT 1359: BOORGAT 6

(2) PROXIMATE ANALYSES—(2) KORTANALISES

F.R.I. Sample Number. Nommer van monster B.-N.-I.	Width ins. Wydte dm.	Cal. Val. lbs./lb. Vw. lbs./lb.	Percentage H_2O. Persentasie H_2O.	Percentage Ash. Persentasie as.	Percentage Vol. Matter. Persentasie vlugbestand.	Percentage fixed Carbon. Persentasie kookskoolstof.	Percentage Fl. 1·45. Persentasie dryfsel 1·45	Percentage Ash, Fl. 1·45. Persentasie as, dryfsel 1·45.	Percentage Fl. 1·6. Persentasie dryfsel 1·6.	Percentage Ash, Fl. 1·6. Persentasie as, dryfsel 1·6.	Sw. No., Fl. 1·45. Sw.-Syf. dryfsel. 1·45.	Sw. No., Fl. 1·6. Sw.-Syf. dryfsel. 1·6.
L 94 E	23	—	2·0	40·3	24·2	33·3	25·4	10·3	42·5	15·2	3	1½
D	4	—	2·3	29·2	28·4	40·1	38·5	11·7	66·2	19·3	4	3
C	34	—	2·1	39·8	23·1	35·0	31·9	7·1	43·2	12·4	2½	1½
B	8	11·4	2·4	20·6	31·1	45·9	62·3	8·7	79·6	13·1	3	3
A	6	10·9	2·4	24·0	30·7	42·8	58·7	11·4	77·8	15·0	3½	2½
L 95 C	23	11·3	2·2	21·6	31·6	44·6	62·2	10·3	80·0	14·3	3½	3
B	53	—	2·0	32·7	26·6	39·7	36·6	9·6	54·7	16·3	3½	2½
A	24	11·6	2·3	19·7	31·8	46·2	66·9	9·5	82·7	13·3	4½	4
L 96	30	11·4	2·3	20·6	31·3	45·8	59·8	8·4	79·0	13·7	4	3½
L 97 E	17	10·7	2·0	25·5	29·8	42·7	51·6	10·6	72·2	15·5	4	2½
D	42	11·8	2·3	18·9	32·4	46·4	66·4	9·5	84·2	13·8	4	4
C	8	—	1·8	32·5	27·6	38·1	40·8	10·1	58·8	15·2	4	3
B	25	11·2	2·0	22·7	30·7	44·6	53·6	8·6	73·0	13·2	3½	3
A	26	10·9	2·2	24·3	31·1	42·4	50·0	8·5	68·8	14·4	4½	4
L 98 E	34	—	1·8	35·6	25·7	36·9	32·5	10·5	51·9	17·7	3	2½
D	43	10·8	2·0	24·6	29·1	44·3	52·0	8·7	71·0	13·4	3½	3½
C	19	—	1·7	33·1	25·3	39·9	32·6	10·0	52·2	16·7	4	2
B	23	—	1·9	29·9	26·7	41·5	44·4	7·7	58·5	13·3	4	3
A	39	—	1·8	30·1	28·0	40·1	41·2	9·0	59·9	15·2	4½	3½
L 99 C	18	—	1·8	36·9	24·5	36·8	33·1	8·2	44·2	13·5	4	3½
B	25	9·7	1·9	30·9	27·8	39·4	41·4	8·7	59·0	14·7	4½	3½
A	30	—	2·0	34·9	26·0	37·1	38·1	10·1	51·4	14·7	4	3½

B.H. 6 (*Contd.*). Bg. 6 (*Verv.*).

L 100 E	19	—	1·9	26·1	30·3	41·5	47·3	9·0	68·6	15·1	5	3½
D	10	—	1·9	29·4	31·4	37·3	41·8	8·7	58·9	[13·9	5½	3½
C	10	—	1·9	31·7	29·8	36·6	43·1	5·9	49·8	9·3	5½	5½
B	22	—	1·9	28·8	28·5	40·6	50·6	8·6	64·2	13·6	5	4
A	18	—	1·6	27·5	29·9	40·3	42·9	8·4	60·3	13·8	4½	4
L 101	9	—	1·7	35·5	26·8	35·7	35·5	7·3	41·3	11·7	4	3½
L 102 B	16	10·9	2·0	23·4	29·8	44·8	58·3	8·0	69·1	11·8	4½	3½
A	17	10·7	2·0	24·7	30·4	42·9	53·9	7·7	63·2	11·4	5½	5
L 103	13	—	1·8	32·4	27·7	37·8	38·5	8·3	66·6	21·2	4½	2½
L 104 B	8	—	1·6	47·9	17·5	33·0	—	—	—	—	—	—
A	18	11·2	2·0	22·4	29·0	46·6	56·2	8·2	83·8	17·4	4	2½
L 105	12	11·0	1·9	24·2	29·9	44·0	56·3	8·1	69·5	11·3	4½	4
L 106	27	—	1·9	34·2	24·7	39·2	37·0	9·5	50·9	13·9	3	2
L 107	20	10·9	2·0	23·8	28·6	45·6	52·4	9·4	72·6	13·9	4	3
L 108 E	90	—	2·0	49·5	16·6	31·9	4·0	—	8·7	16·5	—	—
D	9	—	1·8	31·7	24·8	41·7	38·1	7·5	49·5	11·1	2½	1½
C	17	—	2·2	33·9	19·3	43·6	6·0	10·1	35·4	16·9	1	1 F
B	17	12·3	2·3	16·1	26·7	54·9	67·2	9·2	85·9	11·2	1	1
A	43	—	1·7	28·3	24·6	45·4	32·1	7·5	53·7	12·8	2½	1
L 109	8	12·6	2·4	13·3	29·1	55·2	78·7	5·6	84·9	6·6	2½	2½
L 110	31	—	2·0	34·6	17·8	45·6	14·5	8·3	33·6	14·3	1	1 F
L 111 E	13	—	1·8	36·6	19·7	41·9	10·0	7·3	29·4	13·2	1 F	—
D	27	—	2·0	28·5	20·7	48·8	24·0	6·6	53·0	11·9	1	1
C	119	11·8	2·4	16·8	19·5	61·3	50·5	6·0	75·0	8·9	1 F	—
B	90	11·5	2·3	18·8	19·3	59·6	34·1	7·1	75·8	12·5	1 F	—
A	64	13·4	2·3	9·3	24·4	64·0	80·0	4·7	90·9	6·1	1½	1
L 112 E	17½	11·8	1·8	18·3	21·9	58·0	62·8	8·8	73·6	9·2	1 F	—
D	36	11·4	2·1	20·0	17·5	60·4	27·0	8·1	73·6	13·3	1 F	—
C	30	11·8	2·1	17·9	21·6	58·4	50·3	7·1	74·4	10·3	1 F	—
B	36	11·3	2·1	20·3	19·0	58·6	27·0	7·3	75·7	13·0	1 F	—
A	32	12·7	2·1	12·9	23·0	62·0	69·8	8·7	92·2	10·6	1 F	—
L 113 B	40	12·6	2·3	13·2	19·2	65·3	51·2	6·5	89·0	10·5	1 F	—
A	30	13·0	2·1	11·5	23·8	62·6	70·7	6·5	90·7	8·7	1 F	—

BOREHOLE 7 : PEERBOOM 1356 : BOORGAT 7

Core $\frac{7}{8}$ in. Kern $\frac{7}{8}$ dm.

Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.	Aard van lae.
	Ft. In. *Vt. Dm.*	*Ft. In.* *Vt. Dm.*	
Sand	8 0	—	Sand.
Ouklip	2	—	Ouklip.
Sandstone, white, fine-grained	7 4	—	Sandsteen, wit, fynkorrelrig.
Sandstone, greyish, white, fine-grained	2 9	26 0	Sandsteen, grysagtig, wit, fynkorrelrig.
Sandstone, greyish, white, fine-grained	5	—	Sandsteen, grysagtig, wit, fynkorrelrig.
Sandstone, white, medium-grained	27 3	51 0	Sandsteen, wit, middelkorrelrig.
Sandstone, white, medium-grained	4 2	—	Sandsteen, wit, middelkorrelrig.
Sandstone, white, coarse-grained	6 10	—	Sandsteen, wit, grofkorrelrig.
Sandstone, greyish, black-banded, medium- to coarse-grained	4 3	74 0	Sandsteen, grysagtig, swartgeband, middel- tot grofkorrelrig.
Shale, black, sandy	4	—	Skalie, swart, sanderig.
Sandstone, white, coarse-grained, alternating with black shale bands	6 7	—	Sandsteen, wit, grofkorrelrig, en om die beurt swart skaliebande.
Shale, black, with a few coarse-grained sandstone bands and scattered quartz grains	4 2	85 0	Skalie. swart, met 'n paar grofkorrelrige sandsteenbande en verspreide kwartskorrels.
Shale, black	3 3	—	Skalie, swart.
Shale, grey-black	8	—	Skalie, grys-swart.
Shale, black, with a few sandstone bands	7 8	97 0	Skalie, swart, met 'n paar sandsteenbande.
Shale, black, with a few scattered quartz grains	5 4	—	Skalie, swart, met 'n paar verspreide kwartskorrels.
Shale, grey-black	4	—	Skalie, grys-swart.
Shale, black, with a few scattered quartz grains	5 10	109 1	Skalie, swart, met 'n paar verspreide kwartskorrels.
Shale, grey-black	4	—	Skalie, grys-swart.
Shale, black, with an occasional quartz grain	3 6	—	Skalie, swart, met kwartskorrels hier en daar.
Shale, grey	1 2	—	Skalie, grys.
Shale, black, with very occasional quartz grains	12 0	127 0	Skalie, swart, met baie min kwartskorrels hier en daar.
Shale, black	9 10	—	Skalie, swart.
Shale, black, micaceous	139 2	277 0	Skalie, swart, mikadraend.
Shale, slightly brownish, with a few sandstone bands	7 6	—	Skalie, effens bruinerig, met 'n paar sandsteenbande.
Shale, greyish-blue slaty with conchoidal fracture	5 10	—	Skalie, grysagtig-blou leisteenagtig met skulpvormige breuk.
Shale, greyish blue, slaty, with white and dark blue bands	1 3	—	Skalie, grysagtig-blou, leisteenagtig, met wit en donkerblou bande.
Sandstone, grey, very fine-grained	3 4	296 0	Sandsteen, grys, baie fynkorrelrig.
Sandstone, greyish white, fine-grained	14 0	—	Sandsteen, grysagtig-wit, fynkorrelrig.
Sandstone, greyish, with white and dark bands	8	—	Sandsteen, grysagtig, met wit en donker bande.
Sandstone, greyish white, fine-grained	16 5	327 0	Sandsteen, grysagtig-wit, fynkorrelrig.
Sandstone, greyish fine-grained, banded	12 6	—	Sandsteen, grysagtig fynkorrelrig, gestreep.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. *Vt.*	*In.* *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
Sandstone, light greenish, carrying brown grains....	7	8	—		Sandsteen, liggroenerig, bevat bruin korrels.
Sandstone, greyish and greyish white, fine-grained	20	10	368	2	Sandsteen, grysagtig en grysagtig-wit, fynkorrelrig.
Sandstone, greyish green, medium-grained	2	8	—		Sandsteen, grysagtig-groen, middelkorrelrig.
Sandstone, greyish, fine-grained	4	2	—		Sandsteen, grysagtig, fynkorrelrig.
Sandstone, greenish tinted, fine-grained	19	6	394	8	Sandsteen, grysagtig getint, fynkorrelrig.
Sandstone, greyish white, fine-grained	2	6	—		Sandsteen, grysagtig-wit, fynkorrelrig.
Sandstone, greyish, fine-grained	13	2	—		Sandsteen, grysagtig, fynkorrelrig.
Sandstone, dark grey, fine-grained	3	8	—		Sandsteen, donkergrys, fynkorrelrig.
Sandstone, light grey, fine-grained	7	0	—		Sandsteen, liggrys, fynkorrelrig.
Sandstone, greenish tinted, fine-grained	5	4	427	0	Sandsteen, groenerig getint, fynkorrelrig.
Sandstone, greyish, fine-grained	4	0	—		Sandsteen, grysagtig, fynkorrelrig.
Sandstone, greenish, medium-grained		6	—		Sandsteen, groenerig, middelkorrelrig.
Sandstone, greyish, slightly green towards bottom, fine-grained	28	4	—		Sandsteen, grysagtig, effens groen na onder, fynkorrelrig.
Sandstone, greyish, fine-grained	45	6	506	0	Sandsteen, grysagtig, fynkorrelrig.
Sandstone, grey, argillaceous	9	5	—		Sandsteen, grys, kleihoudend.
Sandstone, white, medium-grained	1	2	—		Sandsteen, wit, middelkorrelrig.
Sandstone, grey, fine, argillaceous	6	7	—		Sandsteen, grys, fyn, kleihoudend.
Sandstone, greyish white, medium-grained with shale bands	5	6	527	0	Sandsteen, grysagtig-wit, middelkorrelrig met skaliebande.
Sandstone, grey-white......	8	6	—		Sandsteen, grys-wit.
Sandstone, grey-white, fine, portions banded and cross-bedded	9	6	—		Sandsteen, grys-wit, fyn, gedeeltes gestreep en kruisgelaag.
Shale, grey, sandy		6	—		Skalie, grys, sanderig.
Sandstone grey-white, medium-grained	8	3	—		Sandsteen, grys-wit, middelkorrelrig.
Shale, grey, sandy		4	—		Skalie, grys, sanderig.
Sandstone, coarse-grained, carrying a pebble of Waterberg quartzite		5	—		Sandsteen, grofkorrelrig; bevat een korrel Waterberg-kwartsiet.
Sandstone, grey, fine argillaceous		8	—		Sandsteen, grys, fyn kleihoudend.
Sandstone, grey, with occasional big quartz pebbles		5	—		Sandsteen, grys, met groot kwartskorrels hier en daar.
Sandstone, grey, fine-banded	9	3	—		Sandsteen, grys, fyn bande.
Sandstone, fine, banded with occasional coarse-grained white portions	3	9	—		Sandsteen, fyn, gestreep met grofkorrelrige wit gedeeltes hier en daar.
Sandstone, white, medium-grained to fine-grained and shaly	20	7	—		Sandsteen, wit, middelkorrelrig tot fynkorrelrig en skalieagtig.
Sandstone, fine, white-grey.	9	3	—		Sandsteen, fyn, wit-grys.
Sandstone, shaly...........		8	—		Sandsteen, skalieagtig.
Sandstone, white-grey with red grains	14	2	611	0	Sandsteen, wit-grys met rooi korrels.

Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.	Aard van lae.
	Ft. In. *Vt. Dm.*	*Ft. In.* *Vt. Dm.*	
Sandstone, medium- to fine-grained and argillaceous with many red grains	7 10	—	Sandsteen, middel- tot fynkorrelrig en kleihoudend met baie rooi korrels.
Sandstone, coarse-grained, reddish brown with white specks belonging to Waterberg System	6 6	631 0	Sandsteen, grofkorrelrig, rooierig-bruin met wit spikkels wat tot die Waterbergsisteem behoort.

BOREHOLE 8 : GROOTGELUK 1360 : BOORGAT 8

Core 3½ in. Kern 3½ dm.

Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.	Aard van lae.
	Ft. In. *Vt. Dm.*	*Ft. In.* *Vt. Dm.*	
Soil	4 0	4 0	Grond.
Gravel	12 0	16 0	Gruis.
Shale, weathered	19 0	35 0	Skalie, verweer.
Clay	25 0	60 0	Klei.
Shale, weathered	5 6	65 6	Skalie, verweer.
Shale, black	3 0	68 6	Skalie, swart.
Coal, mainly bright	2	—	**Steenkool,** hoofsaaklik glansend.
Shale	½	—	Skalie.
Coal, bright	2½	—	**Steenkool,** glansend.
Shale	5	—	Skalie.
Coal, bright with shale stringers	2 1	—	**Steenkool,** glansend met skalie-uitlopers.
Shale	2	—	Skalie.
Coal, bright	5	—	**Steenkool,** glansend.
Shale and coal stringers	7	—	Skalie en steenkooluitlopers.
Coal, bright, pyritic	2 11	75 6	**Steenkool,** glansend, pirities.
Shale, black	12 0	87 6	Skalie, swart.
Coal, mixed, dull and bright	1 5	—	**Steenkool,** gemeng, dof en glansend.
Coal, dull, granular with bright stringers	8	—	**Steenkool,** dof korrelrig met glansende uitlopers.
Coal, mainly bright	11	—	**Steenkool,** hoofsaaklik glansend.
Shale	1	—	Skalie.
Coal, dull, granular with bright stringers	5	—	**Steenkool,** dof, korrelrig met glansende uitlopers.
Coal, mainly bright, dirty	2 2	—	**Steenkool,** hoofsaaklik glansend, vuil.
Shale, bright **coal** on top	7	93 9	Skalie, **glanskool** bo.
Shale, black	2 0	95 9	Skalie, swart.
Coal, bright, pyritic	10	—	**Steenkool,** glansend, pirities.
Shale, carbonaceous	6	—	Skalie, koolstofhoudend.
Coal, very bright, pyritic	4	—	**Steenkool,** baie glansend, pirities.
Shale, carbonaceous	4	—	Skalie, koolstofhoudend.
Coal, bright with 2½″ shale band	1 4	—	**Steenkool,** glansend met 2½″ skalieband.
Shale, carbonaceous	3	—	Skalie, koolstofhoudend.
Coal, bright	7	—	**Steenkool,** glansend.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. *Vt.*	*In.* *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
Shale, carbonaceous		10	—		Skalie, koolstofhoudend.
Coal, granular and shaly, with very bright bands	3	9	104	6	**Steenkool,** korrelrig en skalieagtig, met talryke glansende bande.
Shale, black	1	9	106	3	Skalie, swart.
Coal, mixed, dull, granular and bright **coal**	3	7	—		**Steenkool,** gemeng, dog, korrelrig en **glanskool.**
Shale, carbonaceous		1	—		Skalie, koolstofhoudend.
Coal, mixed, dull, granular and bright with top 6″ very bright	2	10	—		**Steenkool,** gemeng, dof, korrelrig en glansend met boonste 6″ baie glansend.
Shale, carbonaceous, occasional **coal** bands	1	6	—		Skalie, koolstofhoudend, **steenkoolbande** hier en daar.
Coal, mainly bright		10	—		**Steenkool,** hoofsaaklik glansend.
Shale, carbonaceous		3	—		Skalie, koolstofhoudend.
Coal, dull granular with bright **coal** (pyritic)		7	—		**Steenkool,** dof korrelrig met **glanskool** (pirities).
Shale, carbonaceous, with **coal** bands		3	—		Skalie, koolstofhoudend, met **steenkoolbande.**
Coal, mainly bright	1	1	—		**Steenkool,** hoofsaaklik glansend.
Shale, with shaly and bright **coal**		7	—		Skalie, met skalieagtige en glansende **steenkool.**
Coal, mainly bright		9	118	7	**Steenkool,** hoofsaaklik glansend.
Shale, with nine 4″ **coal** bands	13	7	132	2	Skalie, met nege 4″ **steenkoolbande.**
Coal, mainly bright	1	0	133	2	**Steenkool,** hoofsaaklik glansend.
Shale, black, with four 4″ **coal** bands	4	6	137	8	Skalie, swart, met vier 4″ **steenkoolbande.**
Coal, mixed, with shale bands	2	0	139	8	**Steenkool,** gemeng, met skaliebande.
Shale, black, with two 3″ **coal** bands	2	0	141	8	Skalie, swart met twee 3″ **steenkoolbande.**
Coaly shale and shale		10	—		Steenkoolagtige skalie en skalie.
Coal, mainly bright	1	2	—		**Steenkool,** hoofsaaklik glansend.
Shale, carbonaceous with coal stringers		7	—		Skalie, koolstofhoudend met **steenkooluitlopers.**
Coal		3	—		**Steenkool.**
Shale		4	—		Skalie.
Coal		4	—		**Steenkool.**
Shale		4	—		Skalie.
Coal, mainly bright	1	10	—		**Steenkool,** hoofsaaklik glansend.
Sandstone, carbonaceous and ferruginous		8	—		Sandsteen, koolstofhoudend en ysterdraend.
Shale		8	148	8	Skalie.
Shale and **coal** bands	76	10	225	6	Skalie en **steenkoolbande.**
Coal, mixed, dull and bright, with shale bands (pyritic)		8	—		**Steenkool,** gemeng, dof en glansend, met skaliebande (pirities).
Shale and shaly **coal**	1	4	—		Skalie en skalieagtige **steenkool.**
Coal, mainly dull—bright at top	2	10	—		**Steenkool,** hoofsaaklik dof—glansend bo-aan.
Coal, dull granular, few bright bands	3	6	—		**Steenkool,** dof korrelrig, min glansende bande.
Coal, mainly bright	1	9	—		**Steenkool,** hoofsaaklik glansend.
Coal, mainly dull, few bright bands	2	6	—		**Steenkool,** hoofsaaklik dof, min glansende bande.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. *Vt.*	*In.* *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
ale, carbonaceous........		5	238	6	Skalie, koolstofhoudend.
ale, black...............	17	6	256	0	Skalie, swart.
ale, coaly...............	10	6	266	6	Skalie, steenkoolagtig.
ale, brown...............	6	0	272	6	Skalie, bruin.
ale, black...............		3	272	9	Skalie, swart.
al, dull, very fine bands of bright **coal**	1	4	—		**Steenkool,** dof, baie fyn bande **glanskool.**
ale.....................		5	—		Skalie.
al, dull, few thin vitrainous bands	2	9	—		**Steenkool,** dof, min dun vitrietagtige bande.
ale.....................		7	—		Skalie.
al, dull, dirty............	2	11	—		**Steenkool,** dof, vuil.
al, mixed, dull, granular	2	1	—		**Steenkool,** gemeng, dof, korrelrig.
al, dull, with thin bright stringers	1	3	—		**Steenkool,** dof, met dun glansende uitlopers.
ale, pyritic..............		3	—		Skalie, pirities.
al, dull with thin bright stringers	2	2	—		**Steenkool,** dof met dun glansende uitlopers.
ale and shaly **coal**........		10	—		Skalie en skalieagtige **steenkool.**
al, dull with thin bright tringers	4	8	—		**Steenkool,** dof met dun glansende uitlopers.
le and dull shaly **coal**....		5	—		Skalie en dowwe skalieagtige **steenkool.**
al, dull, few bright stringers		6	—		**Steenkool,** dof, min glansende uitlopers.
al, very pyritic..........		10	—		**Steenkool,** baie pirities.
al, mixed dull and bright	1	10	295	6	**Steenkool,** dof en glansend gemeng.
ale, grey................	10	0	305	6	Skalie, grys.
ndstone, shaly...........	2	11	308	5	Sandsteen, skalieagtig.
al, mixed, mainly bright		10	—		**Steenkool,** gemeng, hoofsaaklik glansend.
ndstone, shaly...........		3	—		Sandsteen, skalieagtig.
al, dull, occasional bright bands	5	5	—		**Steenkool,** dof, glansende bande hier en daar.
al, mainly dull, granular.	1	9	—		**Steenkool,** hoofsaaklik dof, korrelrig.
ndstone, shaly...........		½	—		Sandsteen, skalieagtig.
l, dull.................	1	7	—		**Steenkool,** dof.
rites..................		1½	—		Piriet.
l, mainly dull..........	2	10	321	3	**Steenkool,** hoofsaaklik dof.
adstone, banded, shaly..	31	4	352	7	Sandsteen, gestreep, skalieagtig.
adstone, coarse-banded, haly	4	6	357	1	Sandsteen, grofgestreep, skalieagtig.
adstone, banded, shaly..		4	357	5	Sandsteen, gestreep, skalieagtig.
l, dull, with a few bright ands	3	7	361	0	**Steenkool,** dof met 'n paar glansende bande.
dstone, fine-grained.....	2	8	363	8	Sandsteen, fynkorrelrig.
l, dull.................		4	364	0	**Steenkool,** dof.
dstone, shaly, fine-rained	3	9	367	9	Sandsteen, skalieagtig, fynkorrelrig.
l, dull.................		6	368	3	**Steenkool,** dof.
dstone, shaly...........	15	9	384	0	Sandsteen, skalieagtig.

BOREHOLE 8 : GROOTGELUK 1360 : BOORGAT 8

Core 3½ in. Kern 3½ dm.

F.R.I. Sample No. No. van monster B.-N.-I.	Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.		Aard van lae.
		In. *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
L 197D	Mainly bright **coal**. . . .	2	68	6	Hoofsaaklik **glanskool**
	Shale.	½			Skalie.
	Bright **coal**.	2½			**Glanskool.**
	Shale, **N.S.**	5	—		Skalie, **N.G.**
C	Bright **coal** with shale stringers	25	—		**Glanskool** met skali uitlopers.
	Shale, **N.S.**	2	—		Skalie, **N.G.**
B	Bright **coal**.	5	—		**Glanskool.**
	Shale and bright **coal** stringers, **N.S.**	7	—		Skalie en **glanskoolui lopers, N.G.**
A	Bright **coal**—very pyritic	35	75	6	**Glanskool**—baie piritie
L 198E	Mixed dull and bright **coal**	17	87	6	Gemengde dowwe **glanskool.**
D	Dull granular **coal** with bright stringers	8	—		Dowwe korrelrige **stee kool** met glanskoo uitlopers.
C	Mainly bright **coal**. . . .	11	—		Hoofsaaklik **glanskool**
	Sandstone, **N.S.**	1	—		Sandsteen, **N.G.**
B	Dull granular **coal** with bright stringers	5	—		Dowwe korrelrige stee kool met glanskoo uitlopers.
A	Mainly bright dirty **coal**	26	—		Hoofsaaklik onsuiwe **glanskool.**
	Shale with bright **coal** on top **N.S.**	7	93	9	Skalie met **glansko** bo-aan, **N.G.**
L 199C	Very bright pyritic **coal**	10	95	9	Piritiese **steenkool,** ba glansend.
	Carbonaceous shale, **N.S.**	6	—		Koolstofhoudende skalie, **N.G.**
	Very bright pyritic **coal**	4	—		Piritiese **steenkool,** ba glansend.
	Carbonaceous shale, **N.S.**	4	—		Koolstofhoudende skalie, **N.G.**
	Very bright **coal** with two ½″ shaly sandstone bands	16	—		**Steenkool,** baie glansen met twee ½″ skali agtige sandstee bande.
B	Carbonaceous shale, **N.S.**	3	—		Koolstofhoudende skalie, **N.G.**
	Bright **coal**.	7	—		**Glanskool.**
	Carbonaceous shale, **N.S.**	10			Koolstofhoudende skalie, **N.G.**
A	Granular and shaly **coal** with very bright **coal** bands	45	104	6	Korrelrige en skali agtige **steenkool** m **glanskoolbande** w baie glansend is.
L 200E	Mixed dull granular and bright **coal**	43	106	3	Dowwe korrelrige stee kool en **glanskool** g meng.
	Carbonaceous shale, **N.S.**	1	—		Koolstofhoudende skalie, **N.G.**
D	Mixed mainly bright and dull granular **coal**, with top 6″ very bright **coal**	34	—		**Steenkool,** gemeng, hoo saaklik glansend dof met boonste baie glansend.

B.H. 8 (*Contd.*) Bg. 8 (*Verv.*)

F.R.I. mple No. o. van onster .-N.-I.	Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.	Aard van lae.
		In. Dm.	*Ft. In. Vt. Dm.*	
200	Carbonaceous shale, occasional **coal** bands, **N.S.**	18	—	Koolstofhoudende skalie, **steenkoolbande** hier en daar, **N.G.**
C	Mainly bright **coal**. ...	10	—	**Glanskool** hoofsaaklik.
	Carbonaceous shale, **N.S.**	3	—	Koolstofhoudende skalie, **N.G.**
B	Dull granular with bright **coal** (pyritic)	7	—	Dowwe korrelrige **steenkool** met **glanskool** (pirities).
	Carbonaceous shale with very bright **coal** band, **N.S.**	3	—	Koolstofhoudende skalie met **glanskoolband** wat baie glansend is, **N.G.**
A	Mainly bright **coal**. ...	13	—	**Glanskool** hoofsaaklik.
	Shale, shaly and bright **coal, N.S.**	7	—	Skalie, skalieagtige steenkool en **glanskool, N.G.**
	Mainly bright **coal**. ...	9	118 7	**Glanskool** hoofsaaklik.
201	Mainly bright **coal**. ...	12	132 2	**Glanskool,** hoofsaaklik.
	—	—	133 2	—
	N.B. 5′ 6″ black shale with four 4″ **coal** bands below this seam (G.S.O.)			**L.W.** 5′ 6″ swart skalie met vier 4″ **steenkoolbande** onderkant hierdie laag (G.O.).
202	Mixed **coal** with shale bands	24	137 8	Gemengde **steenkool** met skaliebande.
	—	—	139 8	—
	N.B. 2′ 0″ Black shale with two 3″ **coal** bands below this seam.			**L.W.** 2′ 0″ swart skalie met twee 3″ **steenkoolbande** onderkant hierdie laag.
203	Alternating bands of shale and shaly **coal, N.S.**	12	141 8	Skalie bande en skalieagtige **steenkoolbande** om die beurt, **N.G.**
B	Mainly bright **coal**. ...	14	—	**Glanskool,** hoofsaaklik.
	Carbonaceous shale with **coal** stringers, **N.S.**	7	—	Koolstofhoudende skalie met **steenkooluitlopers, N.G.**
	Coal, N.S...........	3	—	**Steenkool, N.G.**
	Shale, **N.S.**..........	4	—	Skalie, **N.G.**
	Coal, N.S...........	4	—	**Steenkool, N.G.**
	Shale, **N.S.**..........	4	—	**Skalie, N.G.**
A	Mainly bright **coal**. ...	20	—	**Glanskool** hoofsaaklik.
	Ferruginous and carbonaceous sandstone, **N.S.**	8	—	Yster- en koolstofhoudende sandsteen, **N.G.**
	Shale, **N.S.**..........	8	148 8	Skalie, **N.G.**
223E	Mixed dull and bright **coal** with shale bands (pyritic)	8	225 6	Gemeng, dowwe en glansende **steenkool** met skaliebande (pirities).
	Shale and shaly **coal, N.S.**	16	—	Skalie en skalieagtige **steenkool, N.G.**
D	Mainly dull **coal**—bright at top	34	—	Hoofsaaklk dowwe **steenkool** glansend bo-aan.
C	Dull granular **coal,** with a few thin bright bands	42	—	Dowwe korrelrige **steenkool** met enkele dun glansende bande.
B	Mainly bright **coal**. ...	21	—	Hoofsaaklik **glanskool.**

F.R.I. Sample No. No. van monster B.-N.-I.	Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.	Aard van lae.
L 223		*In.* *Dm.*	*Ft. In.* *Vt. Dm.*	
A	Mainly dull **coal** with a few bright bands	30	—	Hoofsaaklik doww **steenkool** met enkel glansende bande.
	Carbonaceous shale, **N.S.**	5	238 6	Koolstofhoudende skalie, **N.G.**
L 225H	Dull **coal** very fine bands of bright **coal**	16	272 9	Dowwe **steenkool** bai fyn bandjies **glanskoo**
	Shale, **N.S.**..........	5	—	Skalie, **N.G.**
G	Dull **coal** with a few thin vitrainous bands	33	—	Dowwe **steenkool** me enkele dun vitriet agtige bande.
	Shale, **N.S.**...........	7	—	Skalie, **N.G.**
F	Dull dirty **coal**........	35	—	Dowwe, onsuiwer **steenkool.**
E	Mixed dull granular, dull and dull **coal** with a few bright stringers	25	—	Dowwe korrelrig dowwe, en doww **steenkool** gemeng me enkele glansende uit lopers.
	Dull **coal** with thin bright stringers	15	—	Dowwe **steenkool** me dun glansende uit lopers.
D	Pyritic shale, **N.S.**.....	3	—	Piritiese skalie, **N.G.**
	Dull **coal** with thin bright stringers	26	—	Dowwe **steenkool** me dun glansende uit lopers.
	Shale and shaly **coal, N.S.**	10	—	Skalie en skalieagtig **steenkool, N.G.**
C	Dull **coal** with very thin bright stringers	56	—	Dowwe **steenkool** me dun glansende uit lopers wat baie blink i
	Pyritic shale and dull shaly **coal, N.S.**	5	—	Piritiese skalie en doww skalieagtige **steenkoo** **N.G.**
B	Dull **coal** with few bright stringers	6	—	Dowwe **steenkool** met ' paar glansende uit lopers.
	Very pyritic **coal, N.S.**	10	—	**Steenkool** baie pirities **N.G.**
A	Mixed dull and bright **coal**	20	295 6	Dowwe en glansend **steenkool** gemeng.
L 238E	Mixed mainly bright **coal**	10	308 5	Gemeng hoofsaakli **glanskool.**
	Shaly sandstone, **N.S.**..	3	—	Skalieagtige sandsteen **N.G.**
D	Dull **coal** with occasional bright bands	65	—	Dowwe **steenkool** me glansende bande hie en daar.
C	Mainly dull granular **coal**	21	—	Hoofsaaklik doww korrelrige **steenkool.**
	Shaly sandstone parting, **N.S**	½	—	Skalieagtige sandsteen skeiding, **N.G.**
B	Dull **coal**............	19	—	Dowwe **steenkool.**
	Pyrites.............	1½	—	Piriet.
A	Mainly dull **coal**.....	34	321 3	Hoofsaaklik doww **steenkool.**
L 239	Fine-grained sandstone, **N.S.**	32	357 4	Fynkorrelrige sandsteen **N.G.**
C	Dull **coal** with a few bright bands	42	—	Dowwe **steenkool** me enkele glansende band
B	Dull **coal**............	5	—	Dowwe **steenkool.**
	Fine-grained shaly sandstone, **N.S.**	45	—	Fynkorrelrige skalie agtige sandsteen, **N.G**
A	Dull **coal**..........	6	368 3	Dowwe **steenkool.**

(2) PROXIMATE ANALYSES—(2) KORTANALISES

F.R.I. Sample Number. Nommer van monster B.-N.-I.	Width Ins. Wydte dm.	Cal. Val. lbs./lb. Vw. lbs./lb.	Percentage H_2O. Persentasie H_2O.	Percentage Ash. Persentasie as.	Percentage Vol. Matter. Persentasie vlugbestand.	Percentage fixed Carbon. Persentasie kookskoolstof.	Percentage Fl. 1·45. Persentasie dryfsel 1·45.	Percentage Ash, Fl. 1·45. Persentasie as, dryfsel 1·45.	Percentage Fl. 1·6. Persentasie dryfsel 1·6.	Percentage Ash, Fl. 1·6. Persentasie as, dryfsel 1·6.	Sw. No., Fl. 1·45. Sw.-Syf., dryfsel 1·45.	Sw. No., Fl. 1·6. Sw.-Syl., dryfsel. 1·6.
L 197 D	5	—	2·1	37·8	24·7	35·4	—	—	—	—	—	—
C	25	—	2·7	24·3	29·1	43·9	50·8	8·9	73·2	14·4	4½	3
B	5	—	2·1	21·8	30·0	46·1	60·3	9·0	74·2	12·3	3½	3
A	35	—	2·6	23·3	29·0	45·1	52·6	7·4	73·1	13·1	4	3½
L 198 E	17	—	1·8	33·5	26·5	38·2	—	—	—	—	—	—
D	8	—	1·4	55·2	18·3	25·1	—	—	—	—	—	—
C	11	—	1·8	36·5	25·4	36·3	—	—	—	—	—	—
B	5	—	1·8	44·9	21·3	32·0	—	—	—	—	—	—
A	26	—	2·0	29·0	29·2	39·8	38·2	7·6	57·0	14·3	3½	2
L 199 C	14	—	2·1	21·1	30·8	46·0	53·2	7·8	74·8	12·6	4½	3
B	23	—	2·2	23·8	29·1	44·9	48·3	6·9	70·2	11·7	4	3½
A	45	—	1·9	31·5	25·9	40·7	—	—	—	—	—	—
L 200 E	43	—	1·9	32·9	26·4	38·8	—	—	—	—	—	—
D	34	—	1·8	36·1	25·1	37·0	—	—	—	—	—	—
C	10	—	2·2	23·7	29·7	44·4	44·4	8·0	68·7	13·8	3½	2½
B	7	—	2·0	32·6	25·7	39·7	—	—	—	—	—	—
A	22	—	2·2	27·2	28·0	42·6	36·8	7·2	62·4	13·2	3½	2½
L 201	12	11·6	2·0	19·1	28·6	50·3	47·8	9·2	80·0	13·4	4½	3
L 202	24	—	1·8	28·1	31·4	38·7	37·2	7·3	59·5	13·1	1	3
L 203 B	14	—	1·9	22·3	30·1	45·7	53·5	7·1	71·2	11·8	4½	3
A	20	—	2·0	22·1	32·0	43·9	54·8	9·4	77·6	15·2	5	4

B.H. 8 (*Contd.*). Bg. 8 (*Verv.*).

L 223	E	8	—	2·4	29·9	24·8	42·9	35·4	8·0	47·8	10·0	1½	1
	D	34	—	2·0	28·6	21·5	47·9	18·4	9·1	50·4	14·9	1	1 f
	C	42	—	1·9	34·4	19·7	44·0	—	—	—	—	—	—
	B	21	—	2·0	25·8	26·7	45·5	50·9	8·5	57·2	10·0	2	1
	A	30	—	1·9	31·2	23·1	43·8	—	—	—	—	—	—
L 225	H	16	—	2·3	27·7	17·4	52·6	12·9	7·2	57·7	13·9	1 f	—
	G	33	—	2·5	28·2	15·8	53·6	9·4	5·8	45·0	13·0	1 f	—
	F	35	—	2·4	27·1	20·0	50·5	30·8	5·1	51·5	8·7	1 p	—
	E	25	—	2·3	28·3	17·7	51·7	19·9	4·7	45·0	12·2	1 p	—
	D	41	10·9	2·6	20·2	19·4	57·8	29·7	7·2	71·6	12·7	1 f	—
	C	56	—	2·8	22·0	17·8	57·4	17·9	7·7	71·5	14·1	1 f	—
	B	6	—	2·4	23·5	20·3	53·8	46·6	6·5	64·6	9·8	1 f	—
	A	20	12·1	2·4	14·7	25·0	57·9	68·9	5·3	82·2	7·3	1 f	—
L 238	E	10	12·4	2·3	11·2	28·5	58·0	82·5	4·7	88·3	5·7	1½	1
	D	65	11·0	2·9	19·7	19·7	57·7	32·2	7·9	74·5	13·4	1 f	—
	C	21	10·9	2·5	20·9	23·4	53·2	44·0	7·2	70·3	11·6	1	1 f
	B	19	—	2·3	21·1	21·1	55·5	29·3	7·9	72·0	13·9	1 f	—
	A	34	11·7	2·2	16·9	25·9	55·0	50·8	7·1	80·0	11·2	1 f	—
L 239	C	42	12·0	2·8	14·8	19·2	63·2	60·6	7·2	83·7	10·1	1 f	—
	B	5	—	2·1	21·9	21·0	55·0	44·7	7·5	69·3	11·8	1 f	—
	A	6	—	1·5	30·4	20·6	47·5	13·3	11·5	54·3	19·4	1 f	—

BOREHOLE 9 : WELGELEGEN 1355 : BOORGAT 9

Core ⅞ in. Kern ⅞ dm.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. *Vt.*	*In.* *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
rd soil	13	0	—		Harde grond.
vel and weathered conglomerate	17	0	—		Gruis en verweerde konglomeraat.
y	1	6	31	6	Klei.
dstone, coarse, white with enses of grit	8	6	40	0	Sandsteen, grof, wit met grintsteenlense.
t, white	1	7	—		Grintsteen, wit.
dstone, coarse, white with ome quartz pebbles	9	4	—		Sandsteen, grof, wit met enkele kwartsspoelklippies.
dstone, grey with coarse nd shaly portions		10	—		Sandsteen, grys met growwe en skalie-dele.
le, greyish-yellow with ome quartz grains		6	—		Skalie, grysgeel met enkele kwartskorrels.
dstone, white and grey vith coarse and fine clayey ortions	5	9	—		Sandsteen, wit en grys, met growwe en fyn kleihoudende dele.
t, abundant red iron oxide		5	—		Grintsteen, vol rooi ysteroksiede.
dstone, white		3	—		Sandsteen, wit.
t, abundant red iron oxide		1	—		Grintsteen, vol rooi ysteroksiede.
dstone, grey, with clayey ortions and portions with bundant quartz grains	1	7	—		Sandsteen, grys, met kleihoudende dele en dele vol kwartskorrels.
artz pebble, white		2	—		Kwartsspoelklip, wit.
dstone, coarse and fine layey		10	—		Sandsteen, grof en ook fyn en kleihoudend.
t		4	—		Grintsteen.
dstone, coarse to fine layey	4	0	—		Sandsteen, van grof tot fyn en kleihoudend.
ale, grey, with some white eldspar grains		8	—		Skalie, grys, met enkele wit veldspaatkorrels.
dstone, coarse to fine haly	2	6	—		Sandsteen, grof tot fyn skalie agtig.
ale, blue, top 1½″ with bundant quartz grains nd iron oxides	1	2	77	0	Skalie, blou, waarvan boonste 1½″ vol kwartskorrels en ysteroksiede is.
ale, greyish-blue with fine white sandy portions and ome red iron-rich portions	2	2	—		Skalie, grysblou, met fyn wit sanderige dele en enkele rooi ysterryke deeltjies.
dstone, ferriferous		1	—		Sandsteen, ysterhoudend.
ale, ferriferous, red		4	—		Skalie, ysterhoudend, rooi.
ale, greyish-blue, with andy portions	2	7	—		Skalie, grysblou, met sanderige deeltjies.
dstone, banded		3	—		Sandsteen, gestreep.
ale, bluish-grey, with andy and some red ferri-erous portions	27	4	116	0	Skalie, blougrys, met sanderige en enkele rooi ysterhoudende deeltjies.
ale, blackish-grey with andy portions	21	0	137	0	Skalie, swartgrys met sanderige deeltjies.
ale, greyish-black, banded nd slightly sandy.	4	8	—		Skalie, grysswart, gestreep en effens sanderig.
dstone		1	—		Sandsteen.
ale, greyish-black, with many calcite veins in ottom 2′	33	0	177	0	Skalie, grysswart, met baie kalsietare in onderste 2′.
ale, greyish-black, slightly andy in places and nicaceous along bedding lanes	118	3	295	3	Skalie, grysswart, plek-plek effens sanderig en mikadraend op laagvlakke.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. *Vt.*	*In.* *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
Shale, greyish-black, with sandy portions	4	7	299	10	Skalie, grysswart met sanderige dele.
Sandstone, shaly, with a pebble of Waterberg quartzite		3	—		Sandsteen, skalieagtig, met 'n spoelklip van Waterberg-kwartsiet.
Shale, greyish-black........	5	2	305	0	Skalie, grysswart.
Shale, sandy, grey, and shaly sandstone with some pebbles	3	0	—		Skalie, sanderig, grys, en skalieagtige sandsteen met enkele spoelklippies.
Mudstone, brownish-grey, resembles slate and shines	13	11	321	4	Moddersteen, bruingrys, lyk na leiklip en is blink.
Shale, greyish-black and whitish-grey, slaty (or mudstone)	4	9	—		Skalie, grysswart en witgrys, leiagtig (of moddersteen).
Mudstone, whitish-grey, sandy or very fine clayey sandstone	7	11	—		Moddersteen, witgrys, sanderig, of baie fyn kleihoudende sandsteen.
Sandstone, fine, greyish-white, with some pebbles and several fine clayey portions	13	4	347	0	Sandsteen, fyn, gryswit, met enkele spoelklippies en verskeie fyn kleihoudende dele.
Sandstone, greyish-white, medium-grained to very fine, with red grains	20	0	367	0	Sandsteen, gryswit, middelkorrelrig tot baie fyn, met rooi korrels.
Sandstone, medium-grained, greyish-white, with abundant red grains	2	10	—		Sandsteen, middelkorrelrig, gryswit, vol rooi korrels.
Sandstone, clayey, grey.....	3	4	—		Sandsteen, kleihoudend, grys.
Sandstone, very fine, greyish-white, clayey	12	2	—		Sandsteen, baie fyn, gryswit, kleihoudend.
Sandstone, coarse to fine....	8	4	393	6	Sandsteen, grof tot fyn.
Sandstone, medium-grained, greyish-white, with abundant red grains	11	5	—		Sandsteen, middelkorrelrig, grys-wit, vol rooi korrels.
Grit with red grains........	1	2	—		Grintsteen met rooi korrels.
Sandstone, greyish-white, with red grains	20	2	426	0	Sandsteen, gryswit, met rooi korrels.
Sandstone, very fine, greyish-white, with some coarser portions	5	3	—		Sandsteen, baie fyn, gryswit, met enkele growwer dele.
Sandstone, medium-grained.		10	432	0	Sandsteen, middelkorrelrig.
Sandstone, medium-grained, with red grains	10	2	—		Sandsteen, middelkorrelrig, met rooi korrels.
Sandstone with lenses of grit and pebbles of Waterberg quartzite	1	8	—		Sandsteen met grintsteenlense en spoelklippies van Waterberg-kwartsiet.
Sandstone with red grains...	2	5	—		Sandsteen met rooi korrels.
Grit with many red Waterberg quartzite grains	3	6	453	8	Grintsteen met baie rooi Waterberg-kwartsietkorrels.
Sandstone, medium- to coarse grained, grey, with many red grains	4	5	460	0	Sandsteen, middel- tot grofkorrelrig, grys, met baie rooi korrels.

BOREHOLE IO : VAN WYKSPAN 1365 : BOORGAT IO

Core $\frac{7}{8}$ in. Kern $\frac{7}{8}$ dm.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. *Vt.*	*In.* *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
Soil	14	6	—		Grond.
Sandstone, decomposed	5	6	—		Sandsteen, ontbind.
Sandstone, white, fine-grained	44	3	—		Sandsteen, wit, fynkorrelrig.
Sandstone, reddish brown, fine-grained	2	2	—		Sandsteen, rooierig bruin, fynkorrelrig.
Sandstone, fine-grained, whitish with brownish quartz grains and greenish stains	5	0	—		Sandsteen, fynkorrelrig, witterig met bruinagtige kwartskorrels en groenerige vlekke.
Sandstone, white, fine-grained	12	11	84	4	Sandsteen, wit, fynkorrelrig.
Sandstone, brownish, fine-grained	5	9	90	1	Sandsteen, bruinerig, fynkorrelrig.
Sandstone, white, fine-grained	19	6	109	7	Sandsteen, wit, fynkorrelrig.
Sandstone, fine-grained, greenish grey, carrying small rounded concretions of white sandstone	5	2	114	9	Sandsteen, fynkorrelrig, groenagtig-grys, met klein geronde konkresies van wit sandsteen.
Sandstone, fine-grained, brownish, with patches of white sandstone	19	3	134	0	Sandsteen, fynkorrelrig, bruinerig, met kolle wit sandsteen.
Sandstone, fine-grained, white with light-brown and chocolate-brown patches	13	0	147	0	Sandsteen, fynkorrelrig, wit, met lig- en sjokoladebruin kolle.
Sandstone, fine-grained white and brown	5	2	152	2	Sandsteen, fynkorrelrig, wit en bruin.
Sandstone, fine-grained, chocolate-brown and white	11	9	163	11	Sandsteen, fynkorrelrig, sjokolade-bruin en wit.
Sandstone, white, fine-grained	1	5	165	4	Sandsteen, wit, fynkorrelrig.
Sandstone, white and brown fine-grained and occasional round nodules of white sandstone	6	8	172	0	Sandsteen, wit en bruin fyn korrelrig en geronde klont wit sandsteen hier en daar.
Sandstone, fine-grained chocolate-brown, with occasional white sandstone patches of varying size	7	6	179	6	Sandsteen, fynkorrelrig, sjokolade-bruin, met wit sandsandsteen kolle van afwisselende grootte hier en daar.
Sandstone, fine-grained, with, many small white sandstone patches	57	6	237	0	Sandsteen, fynkorrelrig, met talryke klein wit sandsteen kolle.
Sandstone, fine-grained, chocolate-brown and occasional large white sandstone patches	5	7	242	7	Sandsteen, fynkorrelrig, sjokolade-bruin en groot wit sandsteen kolle hier en daar.
Sandstone, fine-grained, white chocolate-brown	4	11	247	6	Sandsteen, fynkorrelrig, wit sjokoladebruin.
Sandstone, fine-grained white	12	1	259	7	Sandsteen, fynkorrelrig, wit.
Sandstone, fine-grained, white, light brown	5	0	264	7	Sandsteen, fynkorrelrig, wit, en ligbruin.
Sandstone, fine-grained, white	7	0	271	7	Sandsteen, fynkorrelrig, wit.
Sandstone, fine-grained, white and light brown	3	5	275	0	Sandsteen, fynkorrelrig, wit, en ligbruin.
Sandstone, fine-grained, chocolate, light brown	4	10	279	10	Sandsteen, fynkorrelrig, sjokolade, ligbruin.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. *Vt.*	*In.* *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
Sandstone, fine-grained, light greenish to white	2	9	282	7	Sandsteen, fynkorrelrig, liggroenerig tot wit.
Sandstone, fine-grained, chocolate-brown alternating with white sandstone lower down	14	5	297	0	Sandsteen, fynkorrelrig, sjokoladebruin beurtelings met wit sandsteen laeraf.
Sandstone, fine-grained, chocolate-brown and light greenish white. The chocolate-brown sandstone carries patches of light greenish white sandstone	10	0	307	0	Sandsteen, fynkorrelrig, sjokolade-bruin en liggroenerig-wit. Die sjokolade-bruin sandsteen bevat kolle liggroenerig-wit sandsteen.
Sandstone, fine-grained, chocolate-brown, and light greenish white subordinate sandstone	108	3	415	3	Sandsteen, fynkorrelrig, sjokolade-bruin, en ondergeskikte liggroenerig-wit sandsteen.
Sandstone, medium-grained, whitish green to purplish white	3	5	—		Sandsteen, middelkorrelrig, witagtig-groen tot persagtigwit.
Mudstone, brown.........		6	—		Moddersteen, bruin.
Sandstone, medium- to coarse-grained, slightly green tinted at places, with a few chocolate-brown mudstone bands near top	37	10	457	0	Sandsteen, middel- tot grofkorrelrig, plek-plek effens groen getint, met 'n paar sjokolade-bruin moddersteenbande bo-aan.
Sandstone, medium-grained, whitish	2	3	—		Sandsteen, middelkorrelrig, witagtig.
Mudstone, chocolate-brown..	2	8	—		Moddersteen, sjokoladebruin.
Mudstone, greenish tinted..	1	6	—		Moddersteen, groenerig getint
Mudstone, chocolate-brown.	4	5	472	6	Moddersteen, sjokolade-bruin
Mudstone, chocolate-brown, with occasional greyish white variations	53	1	525	7	Moddersteen, sjokolade-bruin met grysagtig-wit soorte hier en daar.
Mudstone, greyish white....	5	11	531	6	Moddersteen, grysagtig-wit.
Mudstone, light chocolate-brown with occasional variations of grey-white and blue-grey	71	8	603	2	Moddersteen, lig sjokolade- Sandstone, white, finegrained bruin met grys-wit en blou-grys soorte hier en daar.
Mudstone, bluish grey......	167	3	770	9	Moddersteen, blouagtig-grys.
Mudstone, black, shaly....	2	0	—		Moddersteen, swart, skalieagtig.
Shale, coaly...............		6	—		Skalie, steenkoolagtig.
Coal, shaly and pyritic....		10	—		**Steenkool,** skalieagtig en pirities.
Shale, black, with coal stringers		8	—		Skalie, swart, met steenkooluitlopers.
Coal, shaly................		11	—		**Steenkool,** skalieagtig.
Shale, coaly...............		8	—		Skalie, steenkoolagtig.
Coal, broken..............	2	7	—		**Steenkool,** gebreek.
Shale, black, and coal....	1	2	—		Skalie, swart, en steenkool.
Coal, with a few shale bands		7	780	7	**Steenkool,** met 'n paar skaliebande.
Coal and shale............	2	9	—		**Steenkool** en skalie.
Mudstone, bluish..........	2	5	789	2	Moddersteen, blouagtig.
Shale, black, with a few coal stringers		11	—		Skalie, swart, met 'n paar **steenkooluitlopers.**
Coal, pyritic..............	1	2	791	3	**Steenkool,** pirities.
Shale, black..............	1	2	792	5	Skalie, swart.
Coal......................		8	793	1	**Steenkool.**
Shale, carbonaceous........		6	793	7	Skalie, koolstofhoudend.
Coal......................		10½	—		**Steenkool.**
Coal and shale, **coal** predominating	9	4½	803	10	**Steenkool,** en skalie, **steenkool** oorheersend.
Coal, shaly in places........	4	8	808	6	**Steenkool,** plek-plek skalieagtig.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. *Vt.*	*In.* *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
Shale and **coal**	7	1	—		Skalie en **steenkool.**
Coal, shaly in places	2	6	818	1	**Steenkool,** plek-plek skalieagtig.
Coal and shale	2	0	820	1	**Steenkool** en skalie.
Coal, shaly in places	8	9	828	10	**Steenkool,** plek-plek skalieagtig.
Shale		4	829	2	Skalie.
Coal and shale	1	4	830	6	**Steenkool** en skalie.
Coal	4	3	834	9	**Steenkool.**
Shale		3	835	0	Skalie.
Coal		11	835	11	**Steenkool.**
Shale		4	836	3	Skalie.
Coal	2	10	839	1	**Steenkool.**
Coal and shale		11	—		**Steenkool** en skalie.
Coal	1	0	—		**Steenkool.**
Coal and shale	2	0	—		**Steenkool** en skalie.
Coal	1	0	844	0	**Steenkool.**
Coal and carbonaceous shale (shale predominating)	9	0	853	0	**Steenkool** en koolstofhoudende skalie (skalie oorheersend).

BOREHOLE 11 : HIEROMTRENT 1359 : BOORGAT 11

Core 3½ in. Kern 3½ dm.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. *Vt.*	*In.* *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
Soil	2	0	2	0	Grond.
Sandstone, weathered	35	0	37	0	Sandsteen, verweer.
Clay, shaly	9	0	46	0	Klei, skalieagtig.
Clay	24	0	70	0	Klei.
Shale, decomposed	14	4	84	4	Skalie, ontbind.
Coal, weathered	2	8	87	0	**Steenkool,** verweer.
Shale, black	1	5	88	5	Skalie, swart.
Coal		9	89	2	**Steenkool.**
Shale, black with **coal** bands	2	10	92	0	Skalie, swart met **steenkoolbande.**
Coal		4	92	4	**Steenkool.**
Shale, black	3	10	96	2	Skalie, swart.
Coal		3	96	5	**Steenkool.**
Shale, black	1	0	97	5	Skalie, swart.
Shale and **Coal**	3	3	100	8	Skalie en **steenkool.**
Shale, black	1	1	101	9	Skalie, swart.
Coal		3	102	0	**Steenkool.**
Shale, black	1	9	103	9	Skalie, swart.
Coal		9	104	6	**Steenkool.**
Shale		8	105	2	Skalie.
Coal	1	3	106	5	**Steenkool.**
Shale, black		10	107	3	Skalie, swart.
Coal		3	107	6	**Steenkool.**
Shale, black	4	9	112	3	Skalie, swart.
Coal, bright		8	—		**Steenkool,** glansend.
Shale		3	—		Skalie.
Coal, bright, with fine shale bands		6	—		**Steenkool,** glansend, met fyn skaliebande.

Nature of Strata.	Thickness Recovered. Dikte verkry. *Ft. Vt.*	*In. Dm.*	True Depth. Ware diepte. *Ft. Vt.*	*In. Dm.*	Aard van lae.
Shale		2	—		Skalie.
Coal, bright, with fine shale bands	1	1	114	11	**Steenkool,** glansend, met fyn skaliebande.
Shale, black, with a few **coal** bands	20	2	135	1	Skalie, swart, met 'n paar **steenkoolbande.**
Coal, bright		8	—		**Steenkool,** glansend.
Shale		1	—		Skalie.
Coal, bright		5	—		**Steenkool,** glansend.
Shale		3	—		Skalie.
Coal, bright	1	4	—		**Steenkool,** glansend.
Shale, with bright **coal** stringers		2	138	0	Skalie, met **glanskooluitlopers.**
Shale, coaly		7	138	7	Skalie, steenkoolagtig.
Shale, carbonaceous	4	7	143	2	Skalie, koolstofhoudend.
Coal, shaly	1	0	144	2	**Steenkool,** skalieagtig.
Shale, black		7	144	9	Skalie, swart.
Coal		4	145	1	**Steenkool.**
Shale, carbonaceous	4	4	149	5	Skalie, koolstofhoudend.
Coal and shale	3	4	152	9	**Steenkool** en skalie.
Shale, carbonaceous	1	4	154	1	Skalie, koolstofhoudend.
Coal, dull granular	1	1	—		**Steenkool,** dof, korrelrig.
Shale, carbonaceous, and shaly **coal**	1	11	—		Skalie, koolstofhoudend, en skalieagtige **steenkool.**
Coal, dull, granular, with occasional bright bands	2	3	—		**Steenkool,** dof, korrelrig, met glansende bande hier en daar.
Coal, dull, granular, and carbonaceous shale	1	2	160	6	**Steenkool,** dof, korrelrig, en koolstofhoudende skalie.
Shale, black	1	10	162	4	Skalie, swart.
Coal, dull		4	—		**Steenkool,** dof.
Shale, carbonaceous	1	10	—		Skalie, koolstofhoudend.
Coal, bright		4	—		**Steenkool,** glansend.
Shale, with a few bright **coal** stringers	1	4	—		Skalie, met 'n paar **glanskooluitlopers.**
Coal, dull with 5″ bright at bottom (pyritic)	3	5	—		**Steenkool,** dof met 5″ glanskool onderaan (pirities).
Sandstone, shaly		1	—		Sandsteen, skalieagtig.
Coal, mainly dull	3	3	—		**Steenkool,** hoofsaaklik dof.
Coal, bright, with 2″ shale 2″ from top	1	2	—		**Steenkool,** glansend, met 2″ skalie 2″ van bo.
Shale		1	—		Skalie.
Coal, mixed with grey clay		11	—		**Steenkool,** gemeng met grys klei.
Shale		6	174	10	Skalie.
Shale, black		11	175	9	Skalie, swart.
Coal, dull, heavy	1	9	177	6	**Steenkool,** dof, swaar.
Shale and **coal**	3	3	180	9	Skalie en **steenkool.**
Shale, with **coal** bands	4	9	185	6	Skalie, met **steenkoolbande.**
Shale, carbonaceous, and shaly **coal**	1	4	—		Skalie, koolstofhoudend, en skalieagtige **steenkool.**
Coal, mixed		6	187	4	**Steenkool,** gemeng.
Shale, carbonaceous	2	8	190	0	Skalie, koolstofhoudend.
Shale and **coal**	3	6	193	6	Skalie en **steenkool.**
Coal, dull granular	2	1	—		**Steenkool,** dof, korrelrig.
Shale		8	—		Skalie.
Coal, dull, with occasional bright stringers	2	6	198	9	**Steenkool,** dof, met glansende uitlopers hier en daar.
Shale, black	6	8	205	5	Skalie, swart.
Shale, coaly	1	4	206	9	Skalie, steenkoolagtig.
Shale	2	10	209	7	Skalie.
Coal	1	0	210	7	**Steenkool.**
Shale, carbonaceous	2	8	213	3	Skalie, koolstofhoudend.
Coal, mixed, dull and bright	1	1	—		**Steenkool,** gemeng, dof en glansend.
Shale, and shaly **coal**	1	3	—		Skalie, en skalieagtige **steenkool.**

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. Vt.	*In. Dm.*	*Ft. Vt.*	*In. Dm.*	
Coal, dull, with occasional bright stringers	4	9	—		**Steenkool,** dof, met glansende uitlopers hier en daar.
Coal, dull, and shale........		8	—		**Steenkool,** dof, en skalie.
Sandstone, shaly...........		1	—		Sandsteen, skalieagtig.
Coal, dull.................	2	7	—		**Steenkool,** dof.
Coal, mainly dull..........	2	10	—		**Steenkool,** hoofsaaklik dof.
Sandstone, carbonaceous....		2	—		Sandsteen, koolstofhoudend.
Coal......................		3	—		**Steenkool.**
Shale, **coal** and shaly sandstone		6	231	6	Skalie, **steenkool** en skalieagtige sandsteen.
Sandstone.................	26	1	257	9	Sandsteen.
Coal, mainly bright.........		3	—		**Steenkool,** hoofsaaklik glansend.
Sandstone.................		1	—		Sandsteen.
Coal, mainly bright.........		10	—		**Steenkool,** hoofsaaklik glansend.
Shale and shaly **coal**........		5	—		Skalie en skalieagtige **steenkool.**
Coal, dull, with occasional bright stringers	6	0	—		**Steenkool,** dof, met glansende uitlopers hier en daar.
Coal, dull, granular, calcitic, very pyritic		6	—		**Steenkool,** dof, korrelrig, kalsietagtig, baie pirities.
Coal, mixed, dull and bright		5	—		**Steenkool,** gemeng, dof en glansend.
Shale, shaly **coal** and dull granular **coal** with some bright bands	1	0	—		Skalie, skalieagtig en dof korrelrige **steenkool** met 'n paar glansende bande.
Coal, dull.................	3	1	—		**Steenkool,** dof.
Grit......................		3	—		Grintsteen.
Coal, dull.................	1	11	272	1	**Steenkool,** dof.
Sandstone.................	48	9	320	10	Sandsteen.
Coal, dull.................	1	6	—		**Steenkool,** dof.
Sandstone.................		2	—		Sandsteen.
Coal......................	2	10	325	4	**Steenkool.**
Sandstone with shale bands	35	8	361	0	Sandsteen met skaliebande.

BOREHOLE II : HIEROMTRENT 1359 : BOORGAT II

F.R.I. Sample No. No. van monster B.-N.-I.	Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.		Aard van lae.
		In. Dm.	*Ft. Vt.*	*In. Dm.*	
262B	Bright **coal**...........	8	112	3	**Glanskool.**
	Shale, **N.S.**...........	3	—		Skalie, **N.G.**
	Bright **coal** with fine shale bands	6			**Glanskool,** met dun skaliebande.
A	Shale, **N.S.**...........	2	114	11	Skalie, **N.G.**
	Bright **coal** with fine shale bands	13			**Glanskool,** met dun skaliebande.

F.R.I. Sample No. No. van monster B.-N.-I.	Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.	Aard van lae.
		In. Dm.	*Ft. In. Vt. Dm.*	
L 263B	Bright **coal**	8	135 1	**Glanskool.**
	Shale, **N.S.**	1		Skalie, **N.G.**
	Bright **coal**	5		**Glanskool.**
	Shale, **N.S.**	3	—	Skalie, **N.G.**
	Bright **coal**	16	—	**Glanskool.**
A	Shale with bright **coal** stringers, **N.S.**	2	138 0	Skalie met **glanskool-uitlopers, N.G.**
L 264	Carbonaceous shale, **N.S.**	10	153 3	Koolstofhoudende skalie, **N.G.**
B	Dull granular **coal**	13	—	Dowwe korrelrige **steenkool.**
	Carbonaceous shale and shaly **coal, N.S.**	23	—	Koolstofhoudende skalie en skalieagtige **steenkool N.G.**
A	Dull granular **coal** with occasional bright bands	27	—	Dof korrelrige **steenkool** met glansende bande hier en daar.
	Dull granular **coal** and carbonaceous shale, **N.S.**	14	160 6	Dowwe korrelrige **steenkool** en koolstofhoudende skalie **N.G.**
L 265	Dull **coal, N.S.**	4	162 4	Dowwe **steenkool, N.G.**
	Carbonaceous shale, **N.S.**	22	—	Koolstofhoudende skalie, **N.G.**
	Bright **coal, N.S.**	4	—	**Glanskool, N.G.**
	Shale with a few bright **coal** stringers, **N.S.**	16	—	Skalie met enkele **glanskooluitlopers, N.G.**
C	Dull **coal** with 5″ bright at bottom (pyritic)	41	—	Dowwe **steenkool** met 5″ glansend onderaan (pirities).
	Shaly sandstone, **N.S.**	1	—	Skalieagtige sandsteen, **N.G.**
B	Mainly dull **coal**	39	—	Hoofsaaklik dowwe **steenkool.**
A	Bright **coal** with 2″ shale 2″ from top **excluded**	14	—	**Glanskool** met 2″ skalie 2″ van bo **uitgeslote**.
	Shale	1	—	Skalie.
	Coal mixed with grey clay, **N.S.**	11	—	**Steenkool** gemeng met grys klei, **N.G.**
	Shale, **N.S.**	6	174 10	Skalie, **N.G.**
L 266	—	—	175 9	—
	Dull heavy **coal**	21	—	Dowwe swaar **steenkool.**
	—	—	177 6	—
L 267	Carbonaceous shale and shaly **coal, N.S**	16	185 6	Koolstofhoudende skalie en skalieagtige **steenkool N.G.**
	Mixed **coal**	6	187 4	Gemengde **steenkool.**
L 268B	Dull granular **coal**	25	193 6	Dowwe korrelrige **steenkool.**
	Shale, **N.S.**	8	—	Skalie, **N.G.**
A	Dull **coal** with occasional bright stringers	30	198 9	Dowwe **steenkool** met glansende uitlopers hier en daar.

F.R.I. Sample No. No. van monster B.-N.-I.	Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.	Aard van lae.
		In. *Dm.*	*Ft. In.* *Vt. Dm.*	
L 269C	Mixed dull and bright **coal**	13	213 3	Dowwe en **glanskool** gemeng.
	Shale and shaly **coal N.S.**	15	—	Skalie en skalieagtige **steenkool, N.G.**
B	Dull **coal** with occasional bright stringers	57	—	Dowwe **steenkool** met **glanskooluitlopers** hier en daar.
	Dull **coal** and shale, **N.S.**	8	—	Dowwe **steenkool** en skalie, **N.G.**
	Shaly sandstone, **N.S.**	1	—	Skalieagtige sandsteen, **N.G.**
A	Dull **coal** (broken core)	31	—	Dowwe **steenkool** (gebreekte kern).
D	Mainly dull **coal**.	34	—	Hoofsaaklik dowwe **steenkool.**
	Carbonaceous sandstone, **N.S.**	2	—	Koolstofhoudende sandsteen, **N.G.**
	Coal (broken core), **N.S.**	3	—	**Steenkool** (gebreekte kern), **N.G.**
	Shale, **coal** and shaly sandstone, **N.S.**	6	231 6	Skalie, **steenkool** en skalieagtige sandsteen, **N.G.**
	49″ of core missing...	—	—	49″ van kern vermis.
L 286 D	Mainly bright **coal**. ...	3	257 9	Hoofsaaklik **glanskool.**
	Sandstone, **N.S.**.......	1		Sandsteen, **N.G.**
	Mainly bright **coal**. ...	10		Hoofsaaklik **glanskool.**
	Shale and shaly **coal, N.S.**	5	—	Skalie en skalieagtige **steenkool, N.G.**
C	Dull coal with occasional bright stringers	72	—	Dowwe **steenkool** met glansende uitlopers hier en daar.
	Dull granular **coal,** calcitic, very pyritic **N.S.**	6	—	Dowwe korrelrige **steenkool,** kalsities, baie pirities, **N.G.**
B	Mixed dull and bright **coal**	5	—	Dowwe en glanskool gemeng.
	Shale and shaly **coal** and dull granular with some bright bands, **N.S.**	12	—	Skalie en skalieagtige **steenkool** en dof korrelrig met enkele glansende bande, **N.G.**
	Dull **coal**............	37		Dowwe **steenkool.**
	Grit..............	3		Grintsteen.
	Dull **coal**............	23	272 1	Dowwe **steenkool.**
L 287	Dull **coal**..........	18	320 10	Dowwe **steenkool.**
	Sandstone..........	2	—	Sandsteen.
	Dull **coal**—1″ pyrites 8″ from top **excluded**	34	325 4	Dowwe **steenkool**—1″ piriet 8″ van bo **uitgeslote.**

BOREHOLE 11: HIEROMTRENT: 1359 BOORGAT 11

(2) PROXIMATE ANALYSES—(2) KORTANALISES

F.R.I. Sample Number. Nommer van monster B.-N.-I.	Width ins. Wydte dm.	Cal. Val. lbs./lb. Vw. lbs./lb.	Percentage H_2O. Persentasie H_2O.	Percentage Ash. Persentasie as.	Percentage Vol. Matter. Persentasie vlugbestand.	Percentage fixed Carbon. Persentasie kookskoolstof.	Percentage Fl. 1·45. Persentasie dryfsel 1·45.	Percentage Ash, Fl. 1·45. Persentasie as, dryfsel 1·45.	Percentage Fl. 1·6. Persentasie dryfsel 1·6.	Percentage Ash, Fl. 1·6. Persentasie as, dryfsel 1·6.	Sw. No., Fl. 1·45. Sw.-Syf., dryfsel 1·45.	Sw. No. Fl. 1·6. Sw.-Syf., dryfsel 1·6.
L 262 B	8	11·7	1·9	19·5	30·0	48·6	59·0	8·4	81·0	13·2	4½	4
A	19	—	1·6	34·4	26·9	37·1	—	—	—	—	—	—
L 263 B	13	13·5	2·1	9·8	34·0	54·1	89·3	7·4	94·3	8·2	4½	4
A	16	13·1	2·0	12·0	34·4	51·6	82·9	7·8	93·1	10·7	3½	2
L 264 B	13	—	1·8	39·6	17·6	41·0	—	—	—	—	—	—
A	27	—	1·7	45·7	18·4	34·2	—	—	—	—	—	—
L 265 C	41	—	1·8	28·3	20·3	49·6	20·0	10·4	50·5	15·9	1	1 f
B	39	—	1·8	31·3	18·8	48·1	—	—	—	—	—	—
A	12	12·3	1·7	16·3	30·7	51·3	70·4	7·1	82·1	9·8	4	3
L 266	21	—	1·8	40·6	15·8	41·8	—	—	—	—	—	—
L 267	6	—	1·6	28·0	25·3	45·1	37·7	9·2	56·9	14·2	1	1
L 268 B	25	—	1·7	35·5	19·8	43·0	—	—	—	—	—	—
A	30	—	1·6	34·6	20·7	43·1	—	—	—	—	—	—
L 269 D	34	10·8	1·9	22·5	20·3	55·3	25·0	6·3	65·3	10·8	1 f	—
C	13	8·3	1·8	36·7	16·1	45·4	4·0	—	20·4	16·5	—	1 f
B	57	—	2·3	36·6	18·7	42·4	—	—	—	—	—	—
A	31	10·2	1·8	27·0	18·4	52·8	30·9	7·7	63·1	13·4	1 f	—
L 286 D	13	14·1	2·0	5·6	29·8	62·6	92·2	4·1	96·9	4·9	2½	2½
C	72	12·5	1·8	17·2	20·5	60·5	44·0	7·4	82·7	12·7	1 f	—
B	5	13·3	2·1	9·9	27·4	60·6	77·7	5·5	92·2	8·2	3	2
A	60	12·4	1·9	15·6	23·3	59·2	52·5	6·5	84·2	10·8	1	1

BOREHOLE 12 : GROOTVLEI 390 : BOORGAT 12

Core 3½ in. Kern 3½ dm.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. *Vt.*	*In.* *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
Sand	14	0	—		Sand.
Ouklip	2	0	—		Ouklip.
Sandstone, clayey, fine-, red, weathered	36	0	52	0	Sandsteen, kleiagtig, fyn, rooi, verweer.
Sandstone, clayey, fine, red, with white patches and white calcitic concretions	10	8	—		Sandsteen, kleiagtig, fyn, rooi, met wit vlekke en wit kalkhoudende konkresies.
Mudstone, purple	3	3	—		Moddersteen, pers.
Sandstone, fine, clayey, red, with white calcitic concretions	5	5	71	4	Sandsteen, fyn, kleiagtig, rooi, met wit kalkhoudende konkresies.
Mudstone, purple		10	—		Moddersteen, pers.
Sandstone, fine, clayey, red, with white calcitic concretions	22	1	94	3	Sandsteen, fyn, kleiagtig, rooi, met wit kalkhoudende konkresies.
Mudstone, purple, with sandy bands	3	1	—		Moddersteen, pers, met sanderige lagies.
Mudstone, sandy, white		10	—		Moddersteen, sanderig, wit.
Sandstone, purplish-red with white patches, with grit and mudstone lenses and bands	3	10	102	0	Sandsteen, persrooi met wit vlekke grintsteen en moddersteenlensies en -lagies.
Sandstone, coarse, red with white portions and mudstone lenses, many joints	15	5	—		Sandsteen, grof, rooi met wit dele en moddersteenlensies, vol nate.
Sandstone, medium-grained, red and white		5	—		Sandsteen, middelkorrelrig, rooi en wit.
Mudstone with quartz grains		6	—		Moddersteen met kwartskorrels.
Sandstone, medium-grained, red and white	2	1	127	0	Sandsteen, middelkorrelrig, rooi en wit.
Sandstone, white, coarse- to medium-grained with lenses of grit and conglomerate	8	0	135	0	Sandsteen, wit, grof tot middelkorrelrig met lensies grintsteen en konglomeraat.
Clay	8	0	—		Klei.
Mudstone	2	0	—		Moddersteen.
Mudstone, red	9	3	154	3	Moddersteen, rooi.
Mudstone, red, with greenish-grey patches	7	6	162	0	Moddersteen, rooi, met groengrys vlekke.
Mudstone, dark red	18	0	—		Moddersteen, donkerrooi.
Mudstone, dark red, with some greenish-grey patches	17	0	197	0	Moddersteen, donkerrooi, met enkele groengrys vlekke.
Mudstone, dark red with little calcite and pyrite	24	4	—		Moddersteen, donkerrooi met bietjie kalsiet en piriet.
Mudstone, grey		7	222	0	Moddersteen, grys.
Mudstone, grey with abundant pyrite	9	3	231	3	Moddersteen, grys met baie piriet.
Mudstone, grey	10	9	242	0	Moddersteen, grys.
Mudstone, grey, hard	18	0	260	0	Moddersteen, grys, hard.
Mudstone, grey, hard, with abundant pyrites and bands of black carbonaceous shale	9	7	269	7	Moddersteen, grys, hard, met baie piriet en lagies swart koolhoudende skalie.
Shale, carbonaceous	2	10	272	5	Skalie, koolstofhoudend.
Coal, dull, granular, shaly with some bright bands		4	—		**Steenkool,** dof, korrelrig, skalieagtig met enkele blink strepies.
Bright coal predominant	1	1	—		**Glanskool** oorwegend.
Shale, carbonaceous		5	—		Skalie, koolstofhoudend.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. *Vt.*	*In.* *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
Bright coal with shale bands		8	—		**Glanskool** met skalie-strepies.
Coal, dull, granular and coaly shale with thin bright **coal** bands		10	—		**Steenkool,** dof, korrelrig en koolskalie met dun **glanskoolstrepies.**
Bright coal, and dull granular **coal** mixed		5	—		**Glanskool,** en dof korrelrige **steenkool** gemeng.
Bright coal	1	6	—		**Glanskool.**
Shale, carbonaceous		8	278	4	Skalie, koolstofhoudend.
Coal		2	—		**Steenkool.**
Shale, carbonaceous	1	0	—		Skalie, koolstofhoudend.
Coal		7	—		**Steenkool.**
Shale, carbonaceous	1	3	281	4	Skalie, koolstofhoudend.
Shale, greyish-black	1	4	—		Skalie, grysswart.
Shale, grey, sandy		7	—		Skalie, grys, sanderig.
Shale, carbonaceous	7	1	—		Skalie, koolstofhoudend.
Coal, dull		1	290	5	**Steenkool,** dof.
Coal, predominantly dull		4	—		**Steenkool,** oorwegend dof.
Shale, carbonaceous	1	1	—		Skalie, koolstofhoudend.
Coal		3	—		**Steenkool.**
Shale, black		3	—		Skalie, swart.
Coal		7	—		**Steenkool.**
Shale, carbonaceous, abundant pyrites	2	1	—		Skalie, koolstofhoudend, vol piriet.
Shale, carbonaceous	1	8	—		Skalie, koolstofhoudend.
Coal		1	—		**Steenkool.**
Shale, carbonaceous	1	1	297	10	Skalie, koolstofhoudend.
Shale with **coal** bands		5	—		Skalie met strepies **steenkool.**
Bright Coal		7	—		**Glanskool.**
Shale with some bright coal bands	2	3	—		Skalie met enkele glanskoolstrepies.
Bright Coal		5	—		**Glanskool.**
Shale with 2″ coal band at middle	1	1	—		Skalie met 2″ koollagie in middel.
Bright coal		5	—		**Glanskool.**
Shale with some bright coal bands	2	7	—		Skalie met enkele glanskoolstrepies.
Bright coal		10	—		**Glanskool.**
Shale, carbonaceous		9	—		Skalie, koolstofhoudend.
Bright coal predominating, with shaly portions		7	—		**Glanskool** oorwegend, met skalieagtige dele.
Shale, carbonaceous		7	—		Skalie, koolstofhoudend.
Bright coal predominating with dull, granular bands		9	—		**Glanskool** oorwegend met dowwe, korrelrige lagies.
Shale		4	—		Skalie.
Bright coal and granular dull **coal.**		9	—		**Glanskool** en korrelrige dowwe **steenkool.**
Shale with bright **coal** bands	2	0	—		Skalie met **glanskoolstrepies.**
Bright coal		9	—		**Glanskool.**
Shale, carbonaceous	1	1	—		Skalie, koolstofhoudend.
Dull coal, granular, with bright **coal** bands	1	6	—		Dowwe **steenkool,** korrelrig, met **glanskoolstrepe.**
Shale		1	—		Skalie.
Dull coal, granular, with bright **coal** bands	1	5	—		Dowwe **steenkool,** korrelrig, met **glanskoolstrepe.**
Shale, carbonaceous	1	4	—		Skalie, koolstofhoudend.
Bright coal predominating		9	—		**Glanskool** oorwegend.
Shale with 3″ **coal** 6″ from bottom	1	11	—		Skalie met 3″ **steenkool** 6″ van onder.
Bright coal	1	0	—		**Glanskool.**
Shale, carbonaceous	2	1	—		Skalie, koolstofhoudend.
Bright coal	2	4	—		**Glanskool.**
Shale, carbonaceous		4	—		Skalie, koolstofhoudend.
Bright coal predominating, abundant pyrites		8	—		**Glanskool** oorwegend, baie piriet.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. Vt.	*In. Dm.*	*Ft. Vt.*	*In. Dm.*	
Shale, carbonaceous		8	—		Skalie, koolstofhoudend.
Coal		3	—		**Steenkool.**
Shale	1	5	—		Skalie.
Bright coal and granular dull **coal**	1	0	—		**Glanskool** en korrelrige dowwe **steenkool.**
Shale		4	—		Skalie.
Bright coal		7	—		**Glanskool.**
Shale, carbonaceous, with bright **coal** bands		2	332	0	Skalie, koolstofhoudend, met **glanskoolstrepies.**
Shale, carbonaceous, 3″ **coal** 11″ from top, abundant pyrites	3	0	335	0	Skalie, koolstofhoudend, 3″ **steenkool** 11″ van bo, baie piriet.
Coal, mixed, with thin shale bands		7	—		**Steenkool,** gemeng, met dun skaliestrepies.
Shale		1½	—		Skalie.
Coal, mixed, with thin shale bands		5	—		**Steenkool,** gemeng, met dun skaliestrepies.
Shale		1	—		Skalie.
Coal, mixed, with thin shale bands	1	8	—		**Steenkool,** gemeng, met dun skaliestrepies.
Bright coal predominating		5	—		**Glanskool** oorwegend.
Shale		2	—		Skalie.
Bright coal predominating		3	—		**Glanskool** oorwegend.
Shale		½	—		Skalie.
Coal, bright, predominating		2	—		**Glanskool,** oorwegend.
Shale with a 2″ **coal** band	1	9	—		Skalie met 'n 2″ **steenkoollagie.**
Coal, mixed	1	2	—		**Steenkool,** gemeng.
Shale with **coal** bands		3	—		Skalie met **steenkoolstrepies.**
Coal and alternating shale bands		10	343	8	**Steenkool** en skalielagies opeenvolgend.
Shale, carbonaceous, with abundant pyrites and **coal** bands	2	6	346	8	Skalie, koolstofhoudend, met baie piriet en **steenkoolstrepies.**
Coal, dull	2	1	—		Dowwe **steenkool.**
Shale, carbonaceous, with 5″ granular dull **coal**	4	3	—		Skalie, koolstofhoudend, met 5″ korrelrige **dofkool.**
Coal, mixed		6	—		**Steenkool,** gemeng.
Shale, carbonaceous		4	—		Skalie, koolstofhoudend.
Coal, mixed		9	—		**Steenkool,** gemeng.
Shale, carbonaceous, with **coal** bands	1	6	—		Skalie, koolstofhoudend, met **steenkoolstrepies.**
Coal, mixed		7	—		**Steenkool,** gemeng.
Shale, carbonaceous	1	2	—		Skalie, koolstofhoudend.
Coal, bright, with shale bands and 5″ shale 6″ from top	1	9	—		**Glanskool** met skaliestrepies en 5″ skalie 6″ van bo.
Shale	1	3	—		Skalie.
Coal, mixed, with shale bands	1	11	—		**Steenkool,** gemeng, met skaliestrepies.
Shale, carbonaceous and shaly **coal**		10	—		Skalie, koolstofhoudend en skalieagtige **steenkool.**
Coal, mixed	2	0	—		**Steenkool,** gemeng.
Coal, shaly and carbonaceous shale	1	0	—		**Steenkool,** skalieagtig en koolstofhoudende skalie.
Coal, mixed, pyritic, 2″ shale 7″ from bottom	3	1	—		**Steenkool,** gemeng, pirities, 2″ skalie 7″ van onder.
Shale, carbonaceous, with bright **coal** bands	2	5	—		Skalie, koolstofhoudend, met **glanskoolstrepies.**
Coal, bright	1	1	—		**Glanskool.**
Shale, carbonaceous		4	—		Skalie, koolstofhoudend.
Coal, mixed		7	—		**Steenkool,** gemeng.
Shale, carbonaceous		7	—		Skalie, koolstofhoudend.
Coal, mixed, with shale bands	1	3	—		**Steenkool,** gemeng, met skaliestrepies.
Shale, carbonaceous, 1″ **coal** 2″ from bottom	1	0	—		Skalie, koolstofhoudend, 1″ **steenkool** 2″ van onder.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. Vt.	*In. Dm.*	*Ft. Vt.*	*In. Dm.*	
Coal, bright		10	—		**Steenkool,** glansend.
Coal and shale, successive bands	1	9	379	6	**Steenkool** en skalie, opeenvolgende lagies.
Shale, carbonaceous, with bright **coal** bands and sandy portions	2	0	381	6	Skalie, koolstofhoudend, met **glanskoolstrepies** en sanderige dele
Coal		1	—		**Steenkool.**
Shale		5	—		Skalie.
Coal, dull, granular, abundant pyrites		3	—		**Steenkool,** dof, korrelrig, baie piriet.
Shale, carbonaceous, with abundant **coal** bands		8	—		Skalie, koolstofhoudend, met baie **steenkoolstrepies.**
Shale	2	6	—		Skalie.
Coal, dull, granular, with shale bands		4	—		**Steenkool,** dof, korrelrig, met skaliestrepies.
Shale	2	4	—		Skalie.
Coal, dull, granular		2	—		**Steenkool,** dof, korrelrig.
Shale		8	—		Skalie.
Coal, bright		8	—		**Steenkool,** glansend.
Shale, sandy		3	—		Skalie, sanderig.
Shale, carbonaceous with bright **coal** bands		11	—		Skalie, koolstofhoudend met **glanskoolstrepies.**
Shale	2	3	—		Skalie.
Coal, mixed, with abundant pyrites		1½	—		**Steenkool,** gemeng, met baie piriet.
Shale	1	2	—		Skalie.
Coal		2	—		**Steenkool.**
Shale		5	—		Skalie.
Coal, dull, granular, with bright **coal** bands and shaly portions	1	2	—		**Steenkool,** dof, korrelrig, met **glanskoollagies** en skalieagtige deeltjies.
Shale	3	2	—		Skalie.
Coal, dull		4	—		**Steenkool,** dof.
Shale, carbonaceous	2	6	—		Skalie, koolstofhoudend.
Shale	2	8	404	10	Skalie.
Shale, portions carbonaceous and sandy for the rest	2	0	—		Skalie, dele koolstofhoudend en verder sanderig.
Sandstone, shaly, and sandy shale, grey	1	0	—		Sandsteen, skalieagtig, en sanderige skalie, grys.
Shale, sandy, brownish-grey	1	9	—		Skalie, sanderig, bruingrys.
Shale, greyish-black	3	0	—		Skalie, grysswart.
Shale, sandy and shaly sandstone, grey, with abundant pyrites	4	0	—		Skalie, sanderig en skalieagtige sandsteen, grys, met baie piriet.
Sandstone, white, medium- to coarse-grained, with greyish-brown shale bands	3	4	—		Sandsteen, wit, middel- tot grofkorrelrig, met grysbruin skalielagies.
Clayey shale, gray, with carbonaceous portions	1	1	—		Kleiskale, grys, met koolstofhoudende deeltjies.
Coal		1	—		**Steenkool.**
Shale, carbonaceous	1	5	422	6	Skalie, koolstofhoudend.
Coal, predominantly dull and shaly with shale bands	3	2	425	8	**Steenkool,** oorwegend dof en skalieagtig met skalielagies.
Shale, carbonaceous	4	6	—		Skalie, koolstofhoudend.
Shale, sandy and carbonaceous	1	5	431	10	Skalie, sanderig en koolstofhoudend.
Shale, carbonaceous		8	—		Skalie, koolstofhoudend.
Shale, greyish-black, with sandstone lenses	1	7	434	2	Skalie, grysswart, met sandsteenlensies.
Shale		6	—		Skalie.
Coal, predominantly dull		10	—		**Steenkool** oorwegend dof.
Shale	1	6	436	9	Skalie.
Mudstone, brownish-grey, with quartz grains	2	1	—		Moddersteen, bruingrys, met kwartskorrels.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. *Vt.*	*In.* *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
Sandstone, feldspathic, white, medium-grained, lenticular, between bands of grey sandy shale, abundant pyrites	2	6	441	4	Sandsteen, veldspaties, wit, middelkorrelrig, lensvormig, tussen lagies grys sanderige skalie, baie piriet.
Shale, sandy, grey with lenses, medium-grained, white, feldspathic sandstone	7	9	449	4	Skalie, sanderig, grys met middelkorrelrige lense, wit, veldspatiese sandsteen.
Clayey shale with sandstone bands and 6″ carbonaceous shale in middle	3	0	—		Kleiskalie met sandsteen lagies en 6″ koolstofhoudende skalie in die middel.
Sandstone, coarse, carbonaceous	1	1	—		Sandsteen, grof, koolstofhoudend.
Shale, greyish-black, carbonaceous, with sandy portions	4	4	457	9	Skalie, grysswart, koolstofhoudend, met sanderige dele.
Shale, black, sandstone grains	2	0	—		Skalie, swart, sandsteenkorrels.
Sandstone, coarse, carbonaceous		9	—		Sandsteen, grof, koolstofhoudend.
Shale, black, sandstone grains	2	10	—		Skalie, swart, sandsteenkorrels.
Sandstone, coarse, carbonaceous		4	—		Sandsteen, grof, koolstofhoudend.
Shale, black, sandstone, grains	1	5	—		Skalie, swart, sandsteenkorrels.
Sandstone, fine, shaly, grey and white		9	—		Sandsteen, fyn, skalieagtig, grys en wit.
Shale, black, sandy...... ...	1	2	467	0	Skalie, swart, sanderig.
Shale, black...............		4	—		Skalie, swart.
Sandstone, coarse, white feldspathic		11	—		Sandsteen, grof, wit, veldspaties.
Shale, carbonaceous with bright **coal** veins and a sandstone lens at top	1	1	—		Skalie, koolstofhoudend met **glanskoolaartjies** en 'n sandsteenlensie bo-in.
Shale, black with sandstone grains	1	0	—		Skalie, swart met sandsteenkorrels.
Sandstone, coarse, carbonaceous		11	—		Sandsteen, grof, koolstofhoudend.
Shale, greyish-black, sandy	1	8	—		Skalie, grys-swart, sanderig.
Sandstone, medium-grained, white, feldspathic with lenses of carbonaceous shale	2	11	475	10	Sandsteen, middelkorrelrig, wit, veldspaties met lensies koolstofhoudende skalie.
Sandstone, white, medium-grained, feldspathic	1	0	—		Sandsteen, wit, middelkorrelrig, veldspaties.
Shale, black, with some sandstone lenses and grains	3	1	—		Skalie, swart, met enkele sandsteenlensies en korrels.
Sandstone, white and banded, medium-grained, feldspathic, with shale and **coal** lenses	3	7	483	6	Sandsteen, wit en gestreep, middelkorrelrig, veldspaties, met lensies skalie en **steenkool.**
Sandstone, carbonaceous, shaly		2	—		Sandsteen, koolstofhoudend, skalieagtig.
Shale, black, slightly sandy towards bottom	2	5	—		Skalie swart, effens sanderig na onder.
Sandstone, grey, shaly......		9	—		Sandsteen, grys, skalieagtig.
Sandstone, medium- to coarse-grained, white and banded, abundant pyrites	4	9	491	8	Sandsteen, middel- tot grofkorrelrig wit en gestreep, baie piriet.
Shale, black...............	1	0	—		Skalie, swart.
Shale, black with sandstone grains	3	0	—		Skalie, swart met sandsteenkorrels.
Sandstone, coarse, grey and white, feldspathic with shaly portions	2	5	—		Sandsteen, grof, grys en wit, veldspaties met skalieagtige dele.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. *Vt.*	*In.* *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
Shale, black, with various sandy portions and lenses	4	8	502	10	Skalie, swart, met verskeie sanderige dele en lense.
Shale, black, abundant pyrites	2	1	—		Skalie, swart, baie piriet.
Shale, greyish-black, sandy	1	0	—		Skalie, grysswart, sanderig.
Sandstone, coarse, white, feldspathic		10	—		Sandsteen, grof, wit, veldspaties.
Shell, black sandy		4			Skalie, swart, sanderig.
Sandstone, shaly	1	1	—		Sandsteen, skalieagtig.
Sandstone, coarse, white, feldspathic		9	—		Sandsteen, grof, wit, veldspaties.
Shale, sandy		3	—		Skalie, sanderig.
Sandstone, coarse, white and carbonaceous	1	3	—		Sandsteen, grof, wit en koolstofhoudend
Shale, black		1	510	6	Skalie, swart.
Shale, black, with bands of coarse sandstone and ½″ **coal** underneath	1	6	—		Skalie, swart, met lagies growwe sandsteen en ½″ **steenkool** onderaan.
Sandstone, coarse, carbonaceous with bands of black sandy shale	1	11	—		Sandsteen, grof, koolstofhoudend, met lagies swart sanderige skalie.
Shale, black, sandy	2	0	—		Skalie, swart, sanderig.
Sandstone, coarse, carbonaceous	1	3	—		Sandsteen, grof, koolstofhoudend.
Shale, black with bright **coal** lenses and sandy portions towards bottom	2	7	—		Skalie, swart met **glanskoollensies** en sanderige dele na ondertoe.
Sandstone, medium-grained, feldspathic, bright **coal** bands	1	0	—		Sandsteen, middelkorrelrig, veldspaties, **glanskoollensies.**
Shale, black, sandy	1	3	522	0	Skalie, swart, sanderig.
Shale, black, sandy, with carbonaceous sandstone lenses	1	3	—		Skalie, swart, sanderig, met koolstofhoudende sandsteenlensies.
Shale, carbonaceous		2	—		Skalie, koolstofhoudend.
Coal, dull with bright **coal** bands		3	523	8	**Steenkool,** dof met **glanskoolstrepies.**
Sandstone, carbonaceous	1	6	525	2	Sandsteen, koolstofhoudend.
Coal, dull, 1″ shale, 1″ from bottom	1	0	526	2	**Steenkool,** dof, 1″ skalie, 1″ van onder.
Shale, black, and carbonaceous shaly sandstone	4	11	531	1	Skalie, swart, en koolstofhoudende skalieagtige sandsteen.
Sandstone, carbonaceous partly shaly and partly coarse-grained.	4	8	535	9	Sandsteen, koolstofhoudend, deels skalieagtig en deels grofkorrelrig.
Coal, dull		4	—		**Steenkool,** dof.
Shale, carbonaceous		2	—		Skalie, koolstofhoudend.
Coal, dull		2	—		**Steenkool,** dof.
Shale, carbonaceous		9	—		Skalie, koolstofhoudend.
Coal, dull, shaly	1	7	538	9	**Steenkool,** dof, skalieagtig.
Shale, black, sandy, with abundant pyrites and bright **coal** lenses	1	10	540	7	Skalie, swart, sanderig, met baie piriet en **glanskoollensies.**
Coal, dull, shaly	2	2	542	9	**Steenkool,** dof, skalieagtig.
Shale, black with some sandstone grains		9	—		Skalie, swart met enkele sandsteenkorrels.
Shale, black, with many sandstone grains	6	3	551	3	Skalie, swart met heelwat sandsteen korrels.
Coal, dull, with some bright bands, ½″ grit 1″ from bottom		6	—		**Steenkool,** dof met enkele glansige strepies, ½″ grintsteen 1″ van onder.
Shale, carbonaceous	2	5	—		Skalie, koolstofhoudend.
Coal, dull	1	1	555	3	**Steenkool,** dof.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. Vt.	*In. Dm.*	*Ft. Vt.*	*In. Dm.*	
Shale, black, sandy.........		3	—		Skalie, swart, sanderig.
Mudstone, grey, with quartz grains	3	8	559	3	Moddersteen, grys, met kwartskorrels.
Sandstone, coarse, grey, clayey	7	9	567	0	Sandsteen, grof, grys, kleihoudend.
Sandstone, coarse, greyish-white, feldspathic, with grit portions and some shaly portions	18	8	585	9	Sandsteen, grof, gryswit, veldspaties, met grintsteen-dele en enkele skalieagtige deeltjies.
Grit and coarse sandstone, feldspathic, with some fine portions	26	3	612	0	Grintsteen en growwe sandsteen, veldspaties, met enkele fyndeeltjies.
Cross layers between 609′ and 610′					Tussen 609′ en 610′ is kruislae.
Sandstone, non-banded, coarse, feldspathic	1	0	—		Sandsteen, ongelaag, grof, veldspaties.
Granite, weathered (no distinct parting)	4	4	—		Graniet, verweer (geen duidelike skeiding).
Biotite gneiss, weathered....	1	0	—		Biotiet-gneis, verweer.
Granite, gneissic, weathered.	2	4	620	10	Graniet, gneisagtig, verweer.
Gneiss with biotite-rich bands, coarse, weathered	5	6	—		Gneis met biotietryke strepe, grof, verweer.
Amphibole schist, weathered	1	3	-		Amfibool-schist, verweer.
Granite with inclusions of amphibole schist, weathered	12	0	—		Graniet met insluitsels van amfibool-schist, verweer.
Amphibole-feldspar schist with granite portions, weathered	10	5	650	0	Amfibool-veldspaat-schist met granietdele, verweer.
Granite, coarse, fresh.......	2	0	652	0	Graniet, grof, vars.
Biotite granite, coarse......	3	0	655	0	Biotiet-graniet, grof.

BOREHOLE 12 : GROOTVLEI 390 : BOORGAT 12

F.R.I. Sample No. No. van Monster B.-N.-I.	Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.		Aard van lae.
		In. Dm.	*Ft. Vt.*	*In. Dm.*	
L 353	Shale, **N.S.**...........	5	272	0	Skalie, **N.G.**
	Dull granular, shaly **coal** with a few bright stringers, **N.S.**	4	—		Dowwe, korrelrige, skalieagtige **steenkool** met 'n paar glansende uitlopers, **N.G.**
D	Mainly bright **coal**. ...	13	—		Hoofsaaklik **glanskool.**
	Shale, **N.S.**...........	5	—		Skalie, **N.G.**
C	Bright **coal** with thin shale stringers	8	—		**Glanskool** met dun skalie-uitlopers.
	Dull granular **coal** and carbonaceous shale, thin bright bands, **N.S.**	10	—		Dowwe, korrelrige **steenkool** en koolstofhoudende skalie, dun glansende bande, **N.G.**
B	Mixed dull granular and bright **coal**	5	—		Dowwe korrelrige **steenkool** en **glanskool** gemeng.
A	Bright **coal**....	18	—		**Glanskool.**
	Carbonaceous shale, **N.S.**	1	277	9	Koolstofhoudende skalie, **N.G.**
	—	—	277	9	—

F.R.I. Sample No. No. van monster B.-N.-I.	Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.	Aard van lae.
		In. *Dm.*	*Ft. In.* *Vt. Dm.*	
L 354	—	—	297 10	—
	Carbonaceous shale with **coal** stringers, **N.S.**	5	—	Koolstofhoudende skalie met **steenkooluitlopers, N.G.**
P	Bright **coal**...........	7	—	Glansende **steenkool.**
	Carbonaceous shale with few bright stringers, **N.S.**	27	—	Koolstofhoudende skalie met enkele glansende uitlopers, **N.G.**
O	Bright **coal**...........	5	—	Glansende **steenkool.**
	Carbonaceous shale—2″ **coal** band in centre, **N.S.**	13	—	Koolstofhoudende skalie —2″ **steenkoolband** in die middel, **N.G.**
N	Bright **coal**...........	5	—	Glansende **steenkool.**
	Carbonaceous shale with occasional bright **coal** stringers, **N.S.**	31	—	Koolstofhoudende skalie met glansende **steenkooluitlopers** hier en daar, **N.G.**
M	Bright **coal**...........	10	—	Glansende **steenkool.**
	Carbonaceous shale, **N.S.**	9	—	Koolstofhoudende skalie, **N.G.**
L	Mixed mainly bright **coal**, shaly	7	—	Gemeng, hoofsaaklik glansende **steenkool,** skalieagtig.
	Carbonaceous shale, **N.S.**	7	—	Koolstofhoudende skalie, **N.G.**
K	Mainly bright **coal** with dull granular bands	9	—	Hoofsaaklik glansende **steenkool** met dowwe, korrelrige bande.
	Shale, **N.S.**	4		Skalie, **N.G.**
J	Mixed dull granular and bright **coal**	9	—	Dowwe korrelrige steenkool en glansende **steenkool.**
	Carbonaceous shale with bright **coal** stringers, **N.S.**	24	—	Koolstofhoudende skalie met glansende **steenkooluitlopers, N.G.**
H	Bright **coal**...........	9	—	Glansende **steenkool.**
	Carbonaceous shale, **N.S.**	13	—	Koolstofhoudende skalie, **N.G.**
	Dull granular **coal** with bright **coal** stringers	18		Dowwe, korrelrige **steenkool** met glansende **steenkooluitlopers.**
G	Shale, **N.S.**...........	1	—	Skalie, **N.G.**
	Dull granular **coal** with bright **coal** stringers	17		Dowwe, korrelrige **steenkool** met glansende **steenkooluitlopers.**
	Carbonaceous shale, **N.S.**	16	—	Koolstofhoudende skalie, **N.G.**
F	Mainly bright **coal**....	9	-	Hoofsaaklik glansende **steenkool.**
	Carbonaceous shale—(one 3″ **coal** band 6″ from bottom), **N.S.**	23		Koolstofhoudende skalie (een 3″ **steenkoolband,** 6″ van onder), **N.G.**
E	Bright **coal**...........	12	—	Glansende **steenkool.**
	Carbonaceous shale, **N.S.**	25	—	Koolstofhoudende skalie, **N.G.**
D	Bright **coal**...........	28	—	Glansende **steenkool.**
	Carbonaceous shale, **N.S.**	4	—	Koolstofhoudende skalie, **N.G.**
C	Mainly bright **coal,** pyritic	8	—	Hoofsaaklik glansende **steenkool,** pirities.
	Shale, **N.S.**...........	8	—	Skalie, **N.G.**
	Coal, N.S............	3	—	**Steenkool, N.G.**
	Shale, **N.S.**...........	17	—	Skalie, **N.G.**

F.R.I. Sample No. No. van monster B.-N.-I.	Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.	Aard van lae.
		In. *Dm.*	*Ft. In.* *Vt. Dm.*	
L 354—(contd.)				
B	Mixed dull granular and bright **coal**	12	—	Dowwe, korrelrige **steenkool** en glansende **steenkool** gemeng.
	Shale, **N.S.**...........	4	—	Skalie, **N.G.**
A	Bright **coal**...........	7	—	Glansende **steenkool.**
	Carbonaceous shale with bright **coal** stringers, **N.S.**	2	—	Koolstofhoudende skalie met glansende **steenkooluitlopers, N.G.**
	—	—	332 0	—
L 355	—	—	335 0	—
	Mixed **coal** with thin shale bands	7	—	Gemengde **steenkool** met dun skaliebande.
	Carbonaceous shale, **N.S.**	1½	—	Koolstofhoudende skalie, **N.G.**
C	Mixed **coal** with thin shale bands	5		Gemengde **steenkool** met dun skaliebande.
	Shale, **N.S.**...........	1		Skalie, **N.G.**
	Mixed **coal** with thin shale bands	20	—	Gemengde **steenkool** met dun skaliebande.
	Mixed, mainly bright **coal**	5	—	Gemengde **steenkool**, hoofsaaklik glansend.
B	Carbonaceous shale, **N.S.**	2	—	Koolstofhoudende skalie, **N.G.**
	Mainly bright **coal**...	3	—	Hoofsaaklik glansende **steenkool.**
	Shale, **N.S.**...........	½	—	Skalie, **N.G.**
	Mainly bright **coal**....	2	—	Hoofsaaklik glansende **steenkool.**
	Carbonaceous shale with one 2″ **coal** band, **N.S.**	21	—	Koolstofhoudende skalie met een 2″ **steenkoolband, N.G.**
A	Mixed **coal**...........	14	—	Gemengde **steenkool.**
	Carbonaceous shale with thin **coal** stringers, **N.S.**	3	—	Koolstofhoudende skalie met dun **steenkooluitlopers, N.G.**
	Alternating thin bands of **coal** and shale, **N.S.**	10	—	Dun bande **steenkool** en skalie om die beurt, **N.G.**
	—	—	343 8	—
L 356	—	—	346 8	—
L	Dull **coal** (very broken core)	25	—	Dowwe **steenkool** (baie gebreekte kern).
	Carbonaceous shale with one 5″ dull granular **coal** band, **N.S.**	51	—	Koolstofhoudende skalie met een 5″ dowwe, korrelrige **steenkoolband, N.G.**
	Mixed **coal**...........	6	—	Gemengde **steenkool.**
K	Carbonaceous shale, **N.S.**	4	—	Koolstofhoudende skalie, **N.G.**
	Mixed **coal**...........	9	—	Gemengde **steenkool.**
	Carbonaceous shale with thin **coal** stringers, **N.S.**	18	—	Koolstofhoudende skalie met dun **steenkooluitlopers, N.G.**
J	Mixed **coal**...........	7	—	Gemengde **steenkool.**
	Carbonaceous shale, **N.S.**	14	—	Koolstofhoudende skalie, **N.G.**
H	Bright **coal,** thin shale stringers 5″ carbonaceous shale 6″ from top excluded	21	—	Glansende **steenkool,** dun skalie-uitlopers—5″ koolstofhoudende skalie 6″ van bo uitgeslote.

F.R.I. Sample No. No. van monster B.-N.-I.	Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.	Aard van lae.
L 356—(contd.)		*In.* *Dm.*	*Ft. In.* *Vt. Dm.*	
	Shale, **N.S.**	15	—	Skalie, **N.G.**
G	Mixed **coal**, thin shale stringers, 1″ shale band 5″ from top excluded	23	—	Gemengde **steenkool,** dun skalie-uitlopers—1″ skalieband 5″ van bo uitgeslote.
	Carbonaceous shale and shaly **coal, N.S.**	10	—	Koolstofhoudende skalie en skalieagtige **steenkool, N.G.**
F	Mixed **coal**	24	—	Gemengde **steenkool.**
	Carbonaceous shale and shaly **coal, N.S.**	12	—	Koolstofhoudende skalie en skalieagtige **steenkool, N.G.**
E	Mixed **coal** (pyritic), 2″ carbonaceous shale 7″ from bottom excluded	37	—	Gemengde **steenkool** (pirities), 2″ koolstofhoudende skalie 7″ van onder uitgeslote.
	Carbonaceous shale with thin bright **coal** bands, **N.S.**	29	—	Koolstofhoudende skalie met dun glansende **steenkooluitlopers, N.G.**
D	Bright **coal**	13	—	Glansende **steenkool.**
	Carbonaceous shale, **N.S.**	4	—	Koolstofhoudende skalie, **N.G.**
C	Mixed **coal**	7	—	Gemengde **steenkool.**
	Carbonaceous shale, **N.S.**	7	—	Koolstofhoudende skalie, **N.G.**
B	Mixed **coal** with thin shale stringers	15	—	Gemengde **steenkool** met dun skalie-uitlopers.
	Carbonaceous shale, 1″ **coal** 2″ from bottom, **N.S.**	12	—	Koolstofhoudende skalie, 1″ **steenkool** 2″ van onder, **N.G.**
A	Bright **coal**	10	—	Glansende **steenkool.**
	Alternating thin bands of **coal** and shale, **N.S.**	21	—	Dun **steenkool-** en skaliebande beurtelings, **N.G.**
	—	—	379 6	—
L 357	**Coal, N.S.**	1	381 6	**Steenkool, N.G.**
	Shale, **N.S.**	5	—	Skalie, **N.G.**
	Dull granular **coal,** very pyritic, **N.S.**	3	—	Dowwe, korrelrige **steenkool,** baie pirities, **N.G.**
	Carbonaceous shale with thin **coal** stringers, **N.S.**	8	—	Koolstofhoudende skalie met dun **steenkooluitlopers, N.G.**
	Shale, **N.S.**	30	—	Skalie, **N.G.**
	Dull granular **coal** with thin shale bands, **N.S.**	4	—	Dowwe, korrelrige **steenkool** met dun skaliebande, **N.G.**
	Shale, **N.S.**	28	—	Skalie, **N.G.**
	Dull granular **coal, N.S.**	2	—	Dowwe, korrelrige **steenkool, N.G.**
	Shale, **N.S.**	8	—	Skalie, **N.G.**
B	Bright **coal**	8	—	Glansende **steenkool.**
	Sandy shale, **N.S.**	3	—	Sanderige skalie, **N.G.**
	Carbonaceous shale with bright **coal** stringers, **N.S.**	11	—	Koolstofhoudende skalie met glansende **steenkooluitlopers, N.G.**
	Shale, **N.S.**	27	—	Skalie, **N.G.**
	Mixed **coal,** very pyritic **N.S.**	1½	—	Gemengde **steenkool,** baie pirities, **N.G.**

F.R.I. Sample No. No. van monster B.-N.-I.	Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.	Aard van lae.
		In. *Dm.*	*Ft. In.* *Vt. Dm.*	
L 357—(contd.)				
	Shale, **N.S.**	14	—	Skalie, **N.G.**
	Coal, N.S.	2	—	**Steenkool, N.G.**
	Shale, **N.S.**	5	—	Skalie, **N.G.**
A	Dull granular **coal** with bright bands, shaly	14	—	Dowwe, korrelrige **steenkool** met glansende bande, skalieagtig.
	Shale and carbonaceous shale, **N.S.**	38	—	Skalie en koolstofhoudende skalie, **N.G.**
	Dull **coal, N.S.**	4	—	Dowwe **steenkool, N.G.**
	Carbonaceous shale, **N.S.**	30	—	Koolstofhoudende skalie, **N.G.**
	Shale, **N.S.**	32	—	Skalie, **N.G.**
	—	—	404 10	—
L 358	—	—	434 2	—
	Shale, **N.S.**	6	—	Skalie, **N.G.**
	Mainly dull **coal**.	10	—	Hoofsaaklik dowwe **steenkool.**
	Shale, **N.S.**	18	—	Skalie, **N.G.**
	—	—	436 9	—
L 380	—	—	523 3	—
	Carbonaceous shale, **N.S.**	2	—	Koolstofhoudende skalie, **N.G.**
	Dull **coal** with occasional bright stringers	3	—	Dowwe **steenkool** met glansende uitlopers hier en daar.
	—	—	523 8	—
L 381	Dull **coal** 1″ carbonaceous shale 1″ from bottom excluded	12	525 2	Dowwe **steenkool** 1″ koolstofhoudende skalie 1″ van onder uitgeslote.
	—	—	526 2	—
382 B	Dull **coal**	4	535 9	Dowwe **steenkool.**
	Carbonaceous shale, **N.S.**	2		Koolstofhoudende skalie, **N.G.**
	Dull **coal**	2		Dowwe **steenkool.**
	Carbonaceous shale, **N.S.**	9		Koolstofhoudende skalie, **N.G.**
A	Dull shaly **coal**........	19		Dowwe skalieagtige **steenkool.**
	—		538 9	
383B	Dull **coal** with occasional bright stringers, ½″ grit 1″ from bottom excluded	6	551 3	Dowwe **steenkool** met glansende uitlopers hier en daar, ½″ grintsteen 1″ van onder uitgeslote.
	Carbonaceous shale, **N.S.**	29	—	Koolstofhoudende skalie, **N.G.**
A	Dull **coal**............	13	—	Dowwe **steenkool.**
	—	—	555 3	—

BOREHOLE 12: GROOTVLEI 390: BOORGAT 12

(2) PROXIMATE ANALYSES—(2) KORTANALISES

F.R.I. Sample Number. Nommer van monster B.-N.-I.	Width ins. Wydte dm.	Cal. Val. lbs./lb. Vw. lbs./lb.	Percentage H_2O. Persentasie H_2O.	Percentage Ash. Persentasie as.	Percentage Vol. Matter. Persentasie vlugbestand.	Percentage fixed Carbon. Persentasie kookskoolstof.	Percentage Fl. 1·45. Persentasie dryfsel 1·45.	Percentage Ash, Fl. 1·45. Persentasie as, dryfsel 1·45.	Percentage Fl. 1·6. Persentasie dryfsel 1·6.	Percentage Ash, Fl. 1·6. Persentasie as, dryfsel 1·6.	Sw. No., Fl. 1·45. Sw.-Syf., dryfsel 1·45	Sw. No., Fl. 1·6. Sw.-Syf., dryfsel. 1·6.
L 353 D	13	—	1·6	27·3	31·4	39·7	45·0	7·4	62·3	13·7	5	5
C	8	—	1·7	31·8	29·3	37·2	—	—	—	—	—	—
B	5	—	1·6	30·7	31·4	36·3	—	—	—	—	—	—
A	18	12·4	2·0	18·4	35·4	44·2	69·3	9·0	84·3	12·4	4	4
L 354 P	7	—	2·2	25·8	29·4	42·6	43·7	8·4	74·1	17·8	5½	3½
O	5	—	2·4	29·6	27·0	41·0	36·2	6·7	59·0	15·2	4½	4
N	5	—	2·4	22·5	28·6	46·5	48·1	9·5	81·3	16·6	5	4½
M	10	—	2·3	22·8	24·0	50·9	49·9	7·0	75·9	12·3	5	5
L	7	—	2·4	29·4	26·9	41·3	40·2	8·4	61·8	15·8	5½	4
K	9	—	2·2	33·5	27·7	36·6	—	—	—	—	—	—
J	9	—	2·6	41·6	25·3	30·5	—	—	—	—	—	—
H	9	—	2·4	22·8	30·2	44·6	55·1	9·6	76·1	14·6	4½	4½
G	35	—	2·5	37·3	25·1	35·1	—	—	—	—	—	—
F	9	—	2·1	28·2	28·0	41·7	43·7	9·0	66·0	17·1	4½	3
E	12	—	2·3	23·4	31·1	43·2	55·9	8·0	75·9	15·0	4½	4½
D	28	—	2·3	21·0	29·9	46·8	63·1	7·7	79·9	11·2	5½	5½
C	8	—	2·0	27·6	30·6	39·8	48·4	9·4	67·8	13·7	5	5
B	12	—	2·2	22·0	32·5	43·3	57·2	7·8	75·8	11·6	4½	4½
A	7	12·7	2·4	13·2	34·8	49·6	86·0	9·0	94·0	10·6	4½	4½
L 355 C	32	—	2·4	27·1	28·2	42·3	45·1	8·6	65·6	14·5	4½	3½
B	10	—	1·9	34·8	26·5	36·8	—	—	—	—	—	—
A	14	—	2·0	33·3	27·3	37·4	—	—	—	—	—	—

B.H. 12 (*Contd.*). | Bg. 12 (*Verv.*).

L 356	L	25	—	1·7	67·9	13·7	16·7	—	—	—	—	—	—
	K	15	—	2·3	25·3	28·1	44·3	54·4	6·3	67·0	9·9	4½	4
	J	7	—	2·2	25·5	29·0	43·3	56·4	7·7	67·2	10·4	4½	3½
	H	16	—	2·2	25·0	30·5	42·3	51·7	7·4	70·0	11·7	4	3½
	G	22	—	2·2	3·7	26·9	39·2	—	—	—	—	—	—
	F	24	—	2·1	27·1	28·9	41·9	45·3	6·9	61·7	10·9	4½	4½
	E	35	—	2·0	27·7	28·8	41·5	43·9	7·6	67·5	16·6	4½	3½
	D	13	11·9	2·1	19·7	31·2	47·0	68·8	8·0	82·0	10·9	5	5
	C	7	—	2·1	23·4	28·8	45·7	51·0	8·9	72·8	13·8	5	4½
	B	15	—	1·9	34·2	28·6	35·3	—	—	—	—	—	—
	A	10	11·5	2·1	19·3	32·5	46·1	67·6	7·0	75·0	8·6	5	5
L 357	B	8	—	2·0	21·8	32·9	43·3	65·4	8·3	75·9	11·2	4	4
	A	14	—	1·7	36·4	23·4	38·5	—	—	—	—	—	—
L 358		10	—	1·6	44·0	20·7	33·7	—	—	—	—	—	—
L 380		3	—	1·8	40·4	16·5	41·3	—	—	—	—	—	—
L 381		11	—	1·9	43·2	15·8	39·1	—	—	—	—	—	—
L 382	B	5	—	1·5	43·8	16·8	37·9	—	—	—	—	—	—
	A	19	—	1·7	47·0	17·4	33·9	—	—	—	—	—	—
L 383	B	5½	—	1·7	39·3	20·3	52·0	16·4	8·4	32·2	15·1	1	1 f
	A	13	—	1·7	50·0	15·5	32·8	—	—	—	—	—	—

BOREHOLE 13 : ORANJEFONTEIN 491 : BOORGAT 13

Core ⅞ in. Kern ⅞ dm.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. *Vt.*	*In.* *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
Soil.	5	0	—		Grond.
Sandstone, soft, weathered.	10	0	—		Sandsteen, sag, verweer.
Sandstone (crushed)	9	6	24	6	Sandsteen (vergruis).
Sandstone, light red with white patches, fine	3	9	—		Sandsteen, ligrooi met wit vlekke, fyn.
Sandstone, light red with white patches, fine and hard	3	9	—		Sandsteen, ligrooi met wit vlekke, fyn en hard.
Sandstone, red with white patches, fine and clayey	33	4	86	6	Sandsteen, rooi met wit vlekke, fyn en kleiagtig.
Sandstone, white with light red patches, fine and clayey	11	9	—		Sandsteen, wit met ligrooi vlekke, fyn en kleiagtig.
Sandstone, fine and clayey, red with white patches and specks	17	0	—		Sandsteen, fyn en kleiagtig, rooi met wit vlekkies en spikkels.
Sandstone, red, fine and clayey with mudstone lenses	1	2	117	2	Sandsteen, rooi, fyn en kleiagtig met moddersteenlensies.
Sandstone, red and light red, fine and clayey with occasional red mudstone lenses	17	10	137	0	Sandsteen, rooi en ligrooi, fyn en kleiagtig met enkele rooi moddersteenlensies.
Sandstone, fine, light red with a few white portions	21	1	160	0	Sandsteen, fyn, ligrooi met enkele wit dele.
Sandstone, light red, fine with small red mudstone lenses	24	1	187	0	Sandsteen, ligrooi, fyn met klein rooi moddersteenlensies.
Sandstone, light red, fine with small red mudstone lenses	10	5	—		Sandsteen, ligrooi, fyn met klein rooi moddersteenlensies.
Sandstone, light red, fine with red and greyish-white mudstone lenses and bands	2	10	—		Sandsteen, ligrooi, fyn met rooi en gryswit moddersteenlensies en -lagies.
Sandstone, light red and white, clayey	24	9	225	3	Sandsteen, ligrooi en wit, kleiagtig.
Mudstone, dark red.	2	3	228	0	Moddersteen, donkerrooi.
Mudstone, dark red with white specks	1	11	—		Moddersteen, donkerrooi met wit spikkels.
Sandstone, very fine, clayey, light red with white patches and lenses of red mudstone	6	6	237	0	Sandsteen, baie fyn, kleiagtig, ligrooi met wit vlekkies en lensies rooi moddersteen.
Sandstone, very fine, clayey, red with white patches	38	11	276	4	Sandsteen, baie fyn, kleiagtig, rooi met wit vlekkies.
Sandstone, very fine, clayey, greyish-white with red patches.		8	277	0	Sandsteen, baie fyn, kleiagtig, gryswit met rooi vlekkies.
Sandstone, fine, clayey, dark red with white patches in upper portion, with vitreous quartz grains	6	10	287	0	Sandsteen, fyn, kleiagtig, donkerrooi met wit vlekkies in boonste deel, met glasagtige kwartskorrels.
Sandstone, fine, clayey, dark red, with vitreous quartz grains	5	5	—		Sandsteen, fyn, kleiagtig, donkerrooi, met glasagtige kwartskorrels.
Sandstone and grit, red, friable, with white grains and patches	1	10	—		Sandsteen en grintsteen, rooi, bros, met wit korrels en vlekke.
Sandstone, white and light red, coarse, with occasional pebbles.	10	2	307	0	Sandsteen, wit en ligrooi, grof, met enkele spoelklippies.

Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.	Aard van lae.
	Ft. In. *Vt. Dm.*	*Ft. In.* *Vt. Dm.*	
Sandstone, coarse, and grit with scattered pebbles. Both reddish and white	13 10	327 0	Sandsteen, grof, en grintsteen met verspreide spoelklippies. Albei rooierig en wit.
Grit and coarse sandstone, red and white, cross banded, with scattered pebbles	10 2	—	Grintsteen en growwe sandsteen, rooi en wit, kruisgelaagd, met verspreide spoelklippies.
Mudstone, greyish-green....	3	—	Moddersteen, grysagtig-groen.
Mudstone, red.............	5 5	347 0	Moddersteen, rooi.
Mudstone, dark red and greyish-purple with grey patches and iron rich portions	9 11	357 0	Moddersteen, donkerrooi en gryspers met grys vlekke en ysterryke deeltjies.
Mudstone, dull purple and reddish	6 3	—	Moddersteen, dofpers en rooierig.
Mudstone, greenish-grey....	1 11	—	Moddersteen, groengrys.
Mudstone brownish-red and dull purple	1 4	367 0	Moddersteen, bruinrooi en dofpers.
Mudstone, dull purple with greenish-grey patches	10 0	377 0	Moddersteen, dofpers met groengrys vlekke.
Mudstone, dull purple with greenish-grey patches with white calcite grains	9 10	387 0	Moddersteen, dofpers met groengrys vlekke waarin wit kalsietkorrels is.
Mudstone, dull purple with greenish-grey patches and calcite grains; a lens quartz and calcite at 388′ 4″	9 5	397 0	Moddersteen, dofpers met groengrys vlekke en kalsietkorrels; 'n lens van kwarts en kalsiet by 388′ 4″.
Mudstone, greenish-grey and brownish-red with occasional calcite veins	9 9	407 0	Moddersteen, groengrys en bruinrooi met enkele kalsietaartjies.
Mudstone, brownish-red with greenish-grey patches and abundant calcite veins	9 3	417 0	Moddersteen, bruinrooi met groengrys vlekke en baie kalsietaartjies.
Mudstone, brownish-red with calcite veins	17 7	—	Moddersteen, bruinrooi met kalsietaartjies.
Mudstone, greyish-brown, brownish-red and purple with patched portions and calcite veins.	11 4	447 0	Moddersteen, grysbruin, bruinrooi en pers met gevlekte dele en kalsietaartjies.
Mudstone, greyish-purple with greenish-grey patches	6 8	—	Moddersteen, gryspers met groengrys vlekke.
Mudstone or shale, grey, hard, occasional calcite veins, portions are black and slightly carbonaceous	22 8	477 0	Moddersteen of skalie, grys, hard, enkele kalsietare, dele is swart en effens koolstofhoudend.
Mudstone, grey, with ill-bedded clay-shale portions	9 9	487 0	Moddersteen, grys, met sleggelaagde kleiskalie-dele.
Mudstone and clay-shale, ill-bedded, grey, pyrites and calcite in places	19 9	507 0	Moddersteen, en kleiskalie, sleggelaagde, grys, plek-plek piriet en kalsiet.
Mudstone, grey, with calcite veins and interbedded bands of carbonaceous shale	8 0	—	Moddersteen, grys, met kalsietaartjies en tussengelaagde strepe koolstofhoudende skalie.
Shale, carbonaceous, abundant pyrites and calcite towards bottom	3 2	518 4	Skalie, koolstofhoudend, baie piriet en kalsiet na onder.
Coal, bright...............	1 0	519 4	**Steenkool,** glansend.
Shale.....................	5	—	Skalie.
Coal, bright, predominant, with thin bands of shale	3 4	523 1	**Steenkool,** oorwegend glansend met dun lagies skalie.
Shale.....................	6	—	Skalie.
Coal, bright...............	4	—	**Steenkool,** glansend.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. Vt.	*In. Dm.*	*Ft. Vt.*	*In. Dm.*	
Shale		10½	—		Skalie.
Bright banded coal with shale bands	1	3½	526	1	**Streepglanskool** met skaliestrepies.
Shale, carbonaceous	11	6	537	7	Skalie, koolstofhoudend.
Coal, bright and shale		5	—		**Steenkool,** glansend en skalie.
Shale, carbonaceous	3	6½	541	6½	Skalie, koolstofhoudend.
Coal, bright		10½	—		**Steenkool,** glansend.
Shale, carbonaceous	1	1½	543	6½	Skalie, koolstofhoudend.
Coal, bright		8	—		**Steenkool,** glansend.
Shale		4	—		Skalie.
Coal, bright bands, shaly **coal,** and shale	1	6½	546	1	**Steenkool,** glansend, lagies skalieagtige **steenkool** en skalie.
Shale		6½	—		Skalie.
Coal, bright bands, shaly **coal**	1	1½	547	9	**Steenkool,** glansend lagies, skalieagtige **steenkool.**
Shale		4½	—		Skalie.
Coal, bright with shale bands	1	8	549	9½	**Steenkool,** glansend met skalielagies.
Coal, bright		8	550	5½	**Steenkool,** glansend.
Shale		4½	—		Skalie.
Coal, bright, predominant, with shale bands at top and bottom	1	8	552	6	**Steenkool,** glansend oorwegend met skaliestrepe onder en bo.
Shale		4	—		Skalie.
Coal, with shale bands		10	—		**Steenkool,** glansend met skalie strepies.
Shale		6	—		Skalie.
Coal, bright with shale bands	1	1	555	3	**Steenkool,** glansend met skaliestrepies.
Shale		4	—		Skalie.
Coal, bright with shale bands	1	7½	557	2½	**Steenkool,** glansend met skaliestrepies.
Shale		3½	—		Skalie.
Coal, with six shale bands 1″ to 3″ thick	11	2	568	8	**Steenkool,** met ses lagies skalie van 1″ tot 3″ dik.
Shale		10	—		Skalie.
Coal, bright	1	7	571	1	**Steenkool,** glansend.
Shale		6	—		Skalie.
Coal, bright, with some dull **coal** bands	2	0	573	7	**Steenkool,** glansend met enkele strepies dowwe **steenkool.**
Shale	1	0	574	7	Skalie.
Coal, bright banded		8	—		**Streepglanskool.**
Shale	1	2	576	5	Skalie.
Coal, with some shale bands	1	5	577	10	**Steenkool,** glansend met enkele skaliestrepies.
Shale		7	—		Skalie.
Coal, bright with shale bands	1	6	579	11	**Steenkool,** glansend met skaliestrepies.
Shale	5	4	585	3	Skalie.
Coal, bright, with some shale bands	3	6	588	9	**Steenkool,** glansend met enkele skaliestrepies.
Shale		4	—		Skalie.
Coal, bright predominant with bands of dull **coal** and shale	2	4	591	5	**Steenkool,** glansend oorwegend met strepies dowwe **steenkool** en skalie.
Shale		6	—		Skalie.
Coal, bright, predominant, with few shale bands	2	0	593	11	**Steenkool,** glansend oorwegend, met min skaliestrepies.
Shale		7	—		Skalie.
Coal, bright with specks of clay and pyrites		4½	—		**Steenkool,** glansend met spikkels klei en piriet.
Shale		11	—		Skalie.

Nature of Strata.	Thickness Recovered. Dikte verkry. *Ft.* *Vt.*	*In.* *Dm.*	True Depth. Ware diepte. *Ft.* *Vt.*	*In.* *Dm.*	Aard van lae.
Coal, bright with specks of clay and pyrites		3½	—		**Steenkool,** glansend, met spikkels klei en piriet.
Shale, carbonaceous........	3	9½	599	10½	Skalie, koolstofhoudend.
Coal, bright..............	2	6	602	4½	**Steenkool,** glansend.
Shale, carbonaceous........	3	0	605	4½	Skalie, koolstofhoudend.
Coal, bright..............	2	3	607	7½	**Steenkool,** glansend.
Shale....................		4	—		Skalie.
Coal, bright with specks of clay and pyrites		7½	608	7	**Steenkool,** glansend met spikkels klei en piriet.
Shale....................		3	—		Skalie.
Coal, bright predominant..		4	609	2	**Steenkool,** oorwegend glansend.
Shale....................		5	—		Skalie.
Coal, bright predominant..		7½	610	2½	**Steenkool,** oorwegend glansend.
Shale, carbonaceous........	1	6	—		Skalie, koolstofhoudend.
Coal, bright with dull bands	2	1	613	9½	**Steenkool,** glansend met dowwe lagies.
Shale, carbonaceous........	1	3½	615	1	Skalie, koolstofhoudend.
Coal, bright..............	3	8	—		**Steenkool,** glansend.
Coal, bright with specks of sand and pyrites	1	10	—		**Steenkool,** glansend met spikkels sand en piriet.
Coal, bright banded........	1	3	621	10	**Streepglanskool.**
Shale, carbonaceous with vitrain veins	2	6	—		Skalie, koolstofhoudend met vitriet-aartjies.
Coal, with dull bands..	2	0	626	4	**Steenkool,** glansend met dowwe lagies.
Shale....................	1	2	—		Skalie.
Coal, bright, predominant, with shale bands	2	2	629	8	**Steenkool,** glansend oorwegend, met skaliestrepies.
Shale....................	1	2	—		Skalie.
Coal, bright with some dull bands towards bottom	1	2	632	0	**Steenkool,** glansend met enkele dowwe strepe na onder.
Shale....................		9	—		Skalie.
Coal, bright, with four shale bands ½" to 2" thick	4	3	637	0	**Steenkool,** glansend met vier skalie lagies van ½" tot 2" dik.
Shale....................		7	—		Skalie.
Coal, with bands of shaly coal and specks of sand and pyrites	3	0	640	7	**Steenkool,** glansend met strepies skalieagtige steenkool en spikkels van sand en piriet.
Shale....................		8	—		Skalie.
Coal, bright with specks of clay and pyrites		8	641	11	**Steenkool,** glansend met klei- en piriet spikkels.
Shale....................	1	1	—		Skalie.
Coal, bright, predominant with shale bands	1	8	644	8	**Steenkool,** oorwegend glansend met skaliestrepies.
Shale, carbonaceous with much pyrites	2	4	—		Skalie, koolstofhoudend met baie piriet.
Coal, bright..............	1	4	648	4	**Steenkool,** glansend.
Shale....................		4	—		Skalie.
Coal, bright..............	1	4	650	0	**Steenkool,** glansend.
Shale, carbonaceous with some **coal** bands	1	4	651	4	Skalie, koolstofhoudend met enkele strepies **steenkool.**
Coal, bright, with many shale bands ¼" to 1½" thick	1	6	652	10	**Steenkool,** glansend met heelwat strepe skalie van ¼" tot 1½" dik.
Shale....................		3	—		Skalie.
Coal, bright with shale bands	1	0	654	1	**Steenkool,** glansend met strepies skalie.
Shale, carbonaceous with lenses of bright **coal**	1	1	655	2	Skalie, koolstofhoudend met **glanskoollensies.**
Coal, bright with shale bands		11	656	1	**Steenkool,** glansend met strepies skalie.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. *Vt.*	*In.* *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
Shale, carbonaceous with lenses of bright **coal**	1	8	657	9	Skalie koolstofhoudend, met **glanskoollensies.**
Coal, bright predominant	1	0	658	9	**Steenkool,** oorwegend glansend.
Shale		8½	—		Skalie.
Coal, with shaly bands and bands of shale	6	0	665	5½	**Steenkool,** glansend met skalieagtige lagies en strepe skalie.
Shale		5½	665	11	Skalie.
Coal, dull, predominating with bright **coal** bands	4	7½	670	6½	**Steenkool,** oorwegend dof, met **glanskoollae.**
Shale, carbonaceous	1	9½	672	4	Skalie, koolstofhoudend.
Shale, sandy, with 1″ sandstone in middle		11	673	3	Skalie, sanderig, met 1″ sandsteen in die middel.
Shale, carbonaceous	1	0	674	3	Skalie, koolstofhoudend.
Shale bands, sandy and carbonaceous sandstone	3	9	678	0	Skalielagies, sanderig en koolstofhoudende sandsteen.
Bright coal bands, dull **coal** and shale		7	—		**Streepglanskoolbande,** dowwe **steenkool** en skalie.
Shale, carbonaceous and coaly shale with dull and bright **coal** bands	4	10	—		Skalie, koolstofhoudend, en steenkoolagtige skalie met lagies dowwe steenkool en **glanskool.**
Coal, dull predominating, with bright **coal** parts and some bands of clay shale	10	6	693	11	**Steenkool,** oorwegend dof, met **glanskooldele** en enkele strepies kleiskalie.
Clay shale, grey		6	694	5	Kleiskalie, grys.
Coal, dull, with bright **coal** bands	6	0	700	5	**Steenkool,** dof met **glanskoolstrepe.**
Shale, sandy and clay shale with bands of carbonaceous or feldspathic sandstone	3	3	703	8	Skalie, sanderig en kleiskalie met lagies koolstofhoudende of veldspatiese sandsteen.
Coal, dull with bright bands and some bands of clay shale	6	8	710	4	**Steenkool,** dof met glanskoollagies en enkele kleiskaliestrepies.
Sandstone, carbonaceous	1	2	—		Sandsteen, koolstofhoudend.
Clay shale grey with some sandy parts	1	8	—		Kleiskalie, grys met enkele sanderige dele.
Sandstone shaly and carbonaceous		4	—		Sandsteen, skalieagtig en koolstofhoudend.
Clay shale, grey		4	—		Kleiskalie, grys.
Sandstone, grey and shaly	1	5	—		Sandsteen, grys en skalieagtig.
Sandstone, coarse, feldpathic, dirty white	1	4	—		Sandsteen, grof, veldspaties, vuilwit.
Sandstone, grey, mudstone-like, very carbonaceous in parts	2	0	—		Sandsteen, grys, moddersteenagtig met baie koolstof in dele.
Grit, greyish white	2	0	—		Grintsteen, grysagtig wit.
Mudstone, grey and sandy with some coarse grit bands	2	8	—		Moddersteen, grys en sanderig met 'n paar growwe grintsteenlagies.
Grit, greyish white		10	—		Grintsteen, grysagtig wit.
Mudstone, grey, carbonaceous		4	—		Moddersteen grys, met koolstofdeeltjies.
Mudstone, greyish blue with coarse sandstone at bottom	3	0	—		Moddersteen, grysagtig-blou met growwe sandsteen onder.
Sandstone, coarse grey		10	—		Sandsteen, grof, grys.
Mudstone, greyish blue	2	1	730	4	Moddersteen, grysagtig-blou.
Coal, dull, with many mudstone grains and pyrites	1	7	731	11	**Steenkool,** dof, met baie moddersteen korreltjies en piriet.
Shale, black, carbonaceous	8	0	739	11	Skalie, swart, koolstofhoudend.
Coal, dull	1	1	741	0	**Steenkool,** dof.
Shale, black, carbonaceous	2	1	743	2	Skalie, swart, koolstofhoudend.

BOREHOLE 14 : LANDMANSRUST 432 : BOORGAT 14

Core 3½ in. Kern 3½ dm.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. *Vt.*	*In.* *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
and	3	0	3	0	Sand.
uklip	3	0	6	0	Ouklip.
andstone (weathered)	6	0	12	0	Sandsteen (verweer).
andstone, chocolate reddish-brown	192	0	204	0	Sandsteen, sjokoladerooibruin.
andstone, chocolate reddish-brown	43	4	247	4	Sandsteen, sjokoladerooibruin.
udstone, whitish-grey	2	4	249	8	Moddersteen, witterig-grys.
andstone, fine, red and white alternating	10	10	260	6	Sandsteen, fyn, rooi en wit afwisselend.
andstone, red and white alternating, medium-grained		6	261	0	Sandsteen, rooi en wit afwisselend, middelkorrelrig.
andstone, whitish-red, medium-grained	5	4	266	4	Sandsteen, witrooi, middelkorrelrig.
andstone, reddish-brown, coarse with quartz pebbles up to ±½″ diameter		6	266	10	Sandsteen, rooibruin, grof met kwartsspoelklippies tot ±½″ deursnee.
andstone, reddish-brown, coarse to medium-grained.	11	9	278	7	Sandsteen, rooibruin, grof tot middelkorrelrig.
andstone, reddish-brown, muddy	3	10	282	5	Sandsteen, rooibruin, modderagtig.
andstone, brownish, mixed with fine reddish-brown sandstone	2	7	285	0	Sandsteen, bruinerig, gemeng met fyn rooibruin sandsteen.
udstone, greyish-purple, mixed with fine sandstone	1	6	286	6	Moddersteen, gryspers, gemeng met fyn sandsteen.
andstone, coarse, greyish-white with grit bands occasionally	14	6	301	0	Sandsteen, grof, gryswit met grintsteenlagies hier en daar.
ndstone, coarse, brown and white with occasional fairly large quartz pebbles	4	9	305	9	Sandsteen, grof, bruin en wit met groterige kwartsklippies hier en daar.
ndstone, fine, purplish-brown, bedded	3	0	308	9	Sandsteen, fyn, persbruin, met gelaagdheid.
ndstone, fine and coarse greyish white	1	0	309	9	Sandsteen, fyn en grof, gryswit.
udstone, purplish-red	6	11	316	8	Moddersteen, persrooi.
udstone, red	4	0	320	8	Moddersteen, rooi.
udstone, purplish-red, greyish-purple	7	4	328	0	Moddersteen, persrooi, gryspers.
udstone, grey	3	0	331	0	Moddersteen, grys.
udstone, purplish-brown	23	0	354	0	Moddersteen, persbruin.
udstone, grey to greyish-purple.	6	2	360	2	Moddersteen, grys tot gryspers.
udstone, grey	20	10	381	0	Moddersteen, grys.
udstone, grey, changes into greyish-black slightly carbonaceous shale towards bottom	15	0	396	0	Moddersteen, grys, gaan oor in grysswart effens koolstofhoudende skalie na onder.
ale, coaly, brittle, much slicken-sided	8	0	—		Skalie, steenkoolagtig, bros, vol glyvlakke.
ndstone, coarse, partly shaly and carbonaceous		6	404	6	Sandsteen, grof, deels skalieagtig en koolstofhoudend.
hist and granite		11	416	0	Schist en graniet.

BOREHOLE 15 : WINDHOEK 469 : BOORGAT 15

Core ⅞ in. Kern ⅞ dm.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. *Vt.*	*In.* *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
Sand	3	0	3	0	Sand.
Pebbles, loose	5	0	8	0	Spoelklippies, los.
Sandstone, coarse, red and white	12	0	20	0	Sandsteen, grof, rooi en wit.
Mudstone, mauve	26	6	46	6	Moddersteen, ligpers.
Mudstone, whitish-grey	29	6	76	0	Moddersteen, witgrys
Mudstone, mauve	6	0	82	0	Moddersteen, ligpers.
Mudstone, mauve, purplish-blue and blue alternating	28	0	110	0	Moddersteen, ligpers, persblo en blou afwisselend.
Mudstone, light blue	7	0	117	0	Moddersteen, ligblou.
Shale, carbonaceous	8	9	125	9	Skalie, koolstofhoudend.
Shale, with **coal** bands		10	126	7	Skalie, met **steenkoolbandjie**
Coal, bright	1	0	127	7	**Steenkool,** glansend.
Shale, carbonaceous	1	4	128	11	Skalie, koolstofhoudend.
Coal, bright, pyrite		7	129	6	**Steenkool,** glansend, piriet.
Shale	1	2	130	8	Skalie.
Coal, bright, calcitic		9	131	5	**Steenkool,** glansend, kalsities.
Shale		6	131	11	Skalie.
Coal and shale, calcitic		6	132	5	**Steenkool** en skalie, kalsities.
Shale	2	8	135	1	Skalie.
Coal, with shale bands		5	135	6	**Steenkool,** met skaliebande.
Shale		6	136	0	Skalie.
Coal, with few shale bands and abundant calcite veins	5	0	141	0	**Steenkool,** met 'n paar skali bande en baie kalsietare.
Shale	1	1	142	1	Skalie.
Coal, bright	1	4	143	5	**Steenkool,** glansend.
Shale		7	144	0	Skalie.
Coal, bright and dull, calcite and pyrite		10	144	10	**Steenkool,** glansend en do kalsiet en piriet.
Shale	1	5	146	3	Skalie.
Shale with **coal** bands		9	147	0	Skalie met **steenkoolbande.**
Shale, carbonaceous	1	3	148	3	Skalie, koolstofhoudend.
Coal, with shale bands	1	0	149	3	**Steenkool,** met skaliebande.
Shale	1	3	150	6	Skalie.
Coal, bright, with abundant shale bands	8	6	159	0	**Steenkool,** glansend, met ba skaliebande.
Shale, with few thin dull **coal** bands	2	4	161	4	Skalie, met 'n paar dun doww **steenkoollagies.**
Coal and shale	1	1	162	5	**Steenkool** en skalie.
Shale, carbonaceous	1	0	163	5	Skalie, koolstofhoudend.
Coal, bright and dull, pyrites		6	163	11	**Steenkool,** glansend en do piriet.
Shale, with **coal** bands		10	164	9	Skalie, met **steenkoobandjies.**
Coal and shale	2	1	166	10	**Steenkool** en skalie.
Shale, carbonaceous	1	6	168	4	Skalie, koolstofhoudend.
Coal and shale, **coal** predominant ±60 per cent.	8	5	176	9	**Steenkool** en skalie, **steenko** oorwegend, ±60 persent.
Coal, bright, calcite veins.	1	5	178	2	**Steenkool,** glansend, kalsietar
Shale, coaly	2	1	180	3	Skalie, steenkoolagtig.
Coal, bright with abundant shale bands and pyrite	3	5	183	8	**Steenkool,** glansend met ba skaliebande en piriet.
Shale		4	184	0	Skalie.
Shale, with few **coal** bands	1	6	185	6	Skalie, met 'n paar **steenkoo** **bande.**
Coal, bright	2	6	188	0	**Steenkool,** glansend.
Shale, with **coal** bands		4	188	4	Skalie, met **steenkoolbande.**
Shale, grey and black with few **coal** bands	4	10	193	2	Skalie, grys en swart met paar **steenkoolbande.**

Nature of Strata.	Thickness Recovered. Dikte verkry. *Ft.* *Vt.*	*In.* *Dm.*	True Depth. Ware diepte. *Ft.* *Vt.*	*In.* *Dm.*	Aard van lae.
Sandstone, carbonaceous grey, fine with few greyish-blue mudstone bands	1	3	194	5	Sandsteen, koolstofhoudend grys, fyn met 'n paar grysblou moddersteenbande.
Shale, carbonaceous, with few **coal** bands	3	3	197	8	Skalie, koolstofhoudend, met 'n paar **steenkoolbande.**
Shale, carbonaceous and **coal,** bright, shale predominant	3	5	201	1	Skalie, koolstofhoudend en **steenkool,** glansend, skalie oorwegend.
Coal, bright, pyritic, calcitic		10	201	11	**Steenkool,** glansend, pirities, kalsities.
Coal, and shale	1	5	203	4	**Steenkool,** en skalie.
Shale, carbonaceous	2	0	205	4	Skalie, koolstofhoudend.
Mudstone, dark blue	3	8	209	0	Moddersteen, donkerblou.
Shale, black, with abundant quartz grains	2	8	211	8	Skalie, swart, met baie kwartskorrels.
Shale and **coal,** shale predominant	3	1	214	9	Skalie en **steenkool,** skalie oorwegend
Coal, bright with one 3″ coaly shale band	3	1	217	10	**Steenkool,** glansend met een 3″ koolstofhoudende skalieband.
Shale, carbonaceous	1	2	219	0	Skalie, koolstofhoudend.
Shale	2	6	221	6	Skalie.
Sandstone, whitish-grey, with greyish-white mud specks	6	0	227	6	Sandsteen, witgrys, met gryswit modderspikkels.
Sandstone, whitish-grey, rather coarse	15	6	243	0	Sandsteen, witgrys, growwerig.

BOREHOLE 16 : BITTERFONTEIN 537 : BOORGAT 16

Core $\frac{7}{8}$ in. Kern $\frac{7}{8}$ dm.

Nature of Strata.	Thickness Recovered. Dikte verkry. *Ft.* *Vt.*	*In.* *Dm.*	True Depth. Ware diepte. *Ft.* *Vt.*	*In.* *Dm.*	Aard van lae.
Sand	6	0	—		Sand.
Sandstone, fine, white, slightly weathered at top	6	3	12	3	Sandsteen, fyn, wit, bo effens verweer.
Sandstone, fine, red	1	0	13	3	Sandsteen, fyn, rooi.
Sandstone, fine, red, with occasional variations of white sandstone	98	1	111	4	Sandsteen, fyn, rooi, met wit sandsteensoorte hier en daar.
Sandstone, coarse, greyish-brown.		4	111	8	Sandsteen, grof, vaalbruin.
Sandstone, fine, red, with occasional variations of fine white sandstone	13	8	125	4	Sandsteen, fyn, rooi, met fyn wit sandsteensoorte hier en daar.
Sandstone, coarse, white and brownish	1	8	127	0	Sandsteen, grof, wit en bruinerig.
Sandstone, coarse, white and brownish, purplish in middle	9	2	136	2	Sandsteen, grof, wit en bruinerig met persagtigheid in middel.
Mudstone, grey		6	136	8	Moddersteen, grys.
Sandstone, medium-grained, white	5	0	141	8	Sandsteen, middelkorrelrig, wit.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. Vt.	*In. Dm.*	*Ft. Vt.*	*In. Dm.*	
Sandstone, coarse with occasional quartz pebbles of ½″ diameter	7	4	149	0	Sandsteen, grof met kwart klippies van ½″ deursne hier en daar.
Mudstone, grey and greyish-yellow	3	5	152	5	Moddersteen, grys en grysgee
Mudstone, mauve and greyish-purple with 1′ reddish-brown mudstone at depth of 180′.	107	1	259	6	Moddersteen, ligpers en grys pers met 1′ rooibrui moddersteen op 180′ diept
Shale....................	17	10	277	4	Skalie.
Coal, bright predominant, with abundant shale bands	1	1	278	5	**Steenkool,** glansend oorwegend met baie skaliestrepe.
Shale, carbonaceous........		6	278	11	Skalie, koolstofhoudend.
Coal and shale.............	1	0	279	11	**Steenkool** en skalie.
Shale, carbonaceous........		11	280	10	Skalie, koolstofhoudend.
Coal, bright, with shale bands		10	281	8	**Steenkool,** glansend, met skalie strepies.
Shale, carbonaceous........		4	282	0	Skalie, koolstofhoudend.
Coal, bright, with shale bands		9	282	9	**Steenkool,** glansend, met skalie strepies.
Shale, carbonaceous........	2	4	285	1	Skalie, koolstofhoudend.
Coal, shaly, with bright and shale bands	1	0	286	1	**Steenkool,** skalieagtig, me glansende en skaliestrepe.
Shale, carbonaceous........		5	286	6	Skalie, koolstofhoudend.
Coal, bright and dull mixed with shale bands	3	6	290	0	**Steenkool,** gemeng glansend e dof met skaliestrepe.
Shale, carbonaceous........		4	290	4	Skalie, koolstofhoudend.
Coal, bright, with some shale bands	4	0	294	4	**Steenkool,** glansend, met enkel skalielagies.
Shale, carbonaceous........		10	295	2	Skalie, koolstofhoudend.
Coal, bright.............	1	4	296	6	**Steenkool,** glansend.
Shale, carbonaceous, abundant pyrite	2	1	298	7	Skalie, koolstofhoudend, bai piriet.
Coal, shaly and bright mixed		9	299	4	**Steenkool,** gemeng skalieagtig en glansend.
Shale, carbonaceous........	1	11	301	3	Skalie, koolstofhoudend.
Coal, bright, with shale bands		9	302	0	**Steenkool,** glansend, met skalie strepies.
Shale, carbonaceous........	1	0	303	0	Skalie, koolstofhoudend.
Coal, bright, with 3 shale bands of 3″ each	4	7	307	7	**Steenkool,** glansend, met skalielagies van 3″ elk.
Shale, carbonaceous........	1	6	309	1	Skalie, koolstofhoudend.
Coal, bright, with shale bands		5	309	6	**Steenkool,** glansend, met skalie strepies.
Shale, carbonaceous........	2	7	312	1	Skalie, koolstofhoudend.
Coal, bright..............	1	10	313	11	**Steenkool,** glansend.
Shale, carbonaceous........		7	314	6	Skalie, koolstofhoudend.
Coal, bright..............		6	315	0	**Steenkool**, glansend.
Shale, carbonaceous........	1	6	316	6	Skalie, koolstofhoudend.
Coal, bright and an equal number of shale bands	1	11	318	5	**Steenkool,** glansend en skalie lagies om die helfte.
Shale....................	2	0	320	5	Skalie.
Coal, bright, predominant..	2	2	322	7	**Steenkool,** glansend, oor wegend..
Shale....................	1	0	323	7	Skalie.
Coal, upper half bright **coal** with shale bands; lower half predominantly dull	5	5	329	0	**Steenkool,** boonste helfte **glans kool** met skaliestrepie onderste helfte is oorwegen dof.
Shale, sandy..............	1	0	330	0	Skalie, sanderig.
Coal top: bright with shale and pyrite; middle: bright banded **coal**; bottom: predominantly dull	5	7	335	7	**Steenkool,** bo: glansend me skalie en piriet; middel **streepglanskool**; onder: oor wegend dof.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. *Vt.*	*In.* *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
Shale....................		6	336	1	Skalie.
Coal, shaly................		6	336	7	**Steenkool,** skalieagtig.
Shale....................	2	0	338	7	Skalie.
Coal, bright, with shale bands	2	0	340	7	**Steenkool,** glansend, met skalielagies.
Shale....................	8	8	349	3	Skalie.
Coal, bright, with shale bands and abundant pyrites	1	6	350	9	**Steenkool,** glansend, met skalielagies en baie piriet.
Shale, sandy..............		6	351	3	Skalie, sanderig.
Coal, mixed, bright and shaly, with shale bands	3	0	354	3	**Steenkool,** gemeng, glansend, en skalieagtig, met skaliestrepe.
Shale, sandy..............		3	354	6	Skalie, sanderig.
Sandstone and shale........	27	6	382	0	Sandsteen en skalie.

BOREHOLE 17 : GREENWICH 1005 : BOORGAT 17

Core 3½ in. Kern 3½ dm.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. *Vt.*	*In.* *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
Soil......................	2	0	2	0	Grond.
Sandstone, weathered......	9	0	11	0	Sandsteen, verweer.
Sandstone, fine to coarse-grained	61	0	72	0	Sandsteen, fyn tot grofkorrelrig.
Mudstone..................	10	0	83	0	Moddersteen.
Mudstone, dark red with hard grey portions	7	10½	91	0	Moddersteen, donkerrooi met harde grys dele.
Mudstone, red..............	4	8	—		Moddersteen, rooi.
Mudstone, grey with red and purple patches and round, red nodules in places	7	0	102	8	Moddersteen, grys met rooi en pers vlekke en plek-plek ronde rooi klontjies.
Mudstone, grey, red or with red patches, with many irregular calcite films	8	0	110	8	Moddersteen, grys, rooi of met rooi gevlek met baie onreëlmatige kalsietlagies.
Shale, hard, cherty, red and yellow bands, ferruginous		8	—		Skalie, hard, chertagtig, rooi en geel gestreep, ysterhoudend.
Mudstone, bluish grey or with red patches, abundant calcite in places	8	2	119	5	Moddersteen, blougrys of rooi gevlek, baie kalsiet hier en daar.
Mudstone, grey with red patches, soft	6	9	—		Moddersteen, grys, rooi gevlek, sag.
Mudstone, grey, hard.......		10	—		Moddersteen, grys, hard.
Mudstone, grey with red patches, soft	1	3	128	3	Moddersteen, grys, rooi gevlek, sag.
Mudstone, grey, with red patches	5	0	—		Moddersteen, grys, rooi gevlek.
Mudstone, grey............	1	0	—		Moddersteen, grys.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. Vt.	*In. Dm.*	*Ft. Vt.*	*In. Dm.*	
Clay shale blackish grey, with considerable pyrites and calcite and a sandy band 1″ from bottom. Lowest portion is carbonaceous	6	0	140	3	Kleiskalie, swartgrys, met heelwat piriet en kalsiet en 'n sanderige streep 1″ van onder. Onderste deel is koolstofhoudend.
Black shale roof...........	2	0	142	3	Dak van swart skalie.
Carbonaceous shale, **N.S.**....	0	0½	—		Koolstofhoudende skalie, **N.G.**
Bright **coal** top part pyritic		10½	—		**Glanskool,** boonste deel pirities.
Carbonaceous shale with fine bright coal bands, **N.S.**		2	143	4	Koolstofhoudende skalie met fyn glanskoollagies, **N.G.**
Carbonaceous shale floor...	5	4	148	8	Koolstofhoudende skalie-vloer,
Very bright **coal** with bands of bright coal and shale in middle	1	6	—		**Steenkool,** baie glansend met lagies glanskool en skalie in middel.
Carbonaceous shale, **N.S.**....		7	—		Koolstofhoudende skalie, **N.G.**
Very bright **coal,** mainly gas coal-like	2	7	153	4	**Steenkool,** baie glansend, hoofsaaklik gaskoolagtig.
Carbonaceous shale floor....	4	5	—		Koolstofhoudende skalie vloer.
Bright **coal,** pyritic with a few shale bands		7	—		**Glanskool,** pirities met 'n paar skalielagies.
Shale floor................	9	8	158	4	Skalie-vloer.
Mainly dull coal, with many slip planes, weathered appearance	3	10	—		Hoofsaaklik dowwe steenkool, met baie glyvlakke, verweerde voorkome.
Grey shale, **N.S.**............		8	—		Grys skalie, **N.G.**
Bright **coal**.................	1	6	—		**Glanskool.**
Mixed dull coal predominant, pyritic	1	8	—		Gemeng, hoofsaaklik dowwe steenkool, pirities.
Mainly dull **coal** with shale bands		10	—		Hoofsaaklik dowwe **steenkool** met skalielagies.
Mainly dull **coal** with an occasional shale band, pyritic	1	4	—		Hoofsaaklik **glanskool** met hier en daar 'n skalielagie, pirities.
Bright **coal,** very bright towards bottom	1	0	—		**Glanskool,** baie glansend na onder.
Coal, very bright...........	2	2	181	0	**Steenkool,** baie glansend.
Shale, coaly with bright coal bands	3	2	—		Skalie, steenkoolagtig met glanskoolstrepies.
Shale, carbonaceous with confused bedding in places, sandy parts with clay lenses	5	1	—		Skalie, koolstofhoudend, verwarde gelaagheid in dele, sanderige deeltjies met kleilensies.
Shale, carbonaceous, six coal bands 1″–6″ thick	4	8	194	0	Skalie koolstofhoudend, ses koollagies van 1″–6″ dik.
Shale, carbonaceous, many bright coal bands and abundant pyrites	2	4	—		Skalie, koolstofhoudend, baie glanskoolstrepies en volop piriet.
Shale, greyish black, sandy		10	—		Skalie, grysswart, sanderig.
Sandstone, shaly and grey..		4	—		Sandsteen, skalierig en grys.
Shale, carbonaceous in parts, sandy in others	4	3½	—		Skalie, dele koolstofhoudend en ander sanderig.
Sandstone, shaly...........		4	—		Sandsteen, skalierig.
Shale, greyish black, carbonaceous		10½	203	0	Skalie, grysswart, koolstofhoudend.
Shale, carbonaceous with sandy parts	7	9	—		Skalie, koolstofhoudend met sanderige deeltjies.
Shale, sandy with sandstone lenses		10	—		Skalie, sanderig, met sandsteenlensies.
Shale, coaly, abundant pyrites	2	4½	214	0	Skalie, steenkoolagtig, vol piriet.
Shale, carbonaceous........	5	0	—		Skalie, koolstofhoudend.
Shale, carbonaceous, bright coal bands, with sandy lenses and pyrites		8½	—		Skalie, koolstofhoudend, glanskoolstrepies met sanderige lensies en piriet.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. *Vt.*	*In.* *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
Shale, carbonaceous, with sandy parts	3	0	—		Skalie, koolstofhoudend, met sanderige dele.
Sandstone, shaly, carbonaceous, abundant pyrites	6	4	228	3	Sandsteen, skalieagtig, koolstofhoudend, vol piriet.
Sandstone, shaly, carbonaceous, abundant pyrites		6½	—		Sandsteen, skalieagtig, koolstofhoudend, vol piriet.
Clay shale, greyish black....	1	0	—		Kleiskalie, grysswart.
Sandstone, clayey, grey.....	1	7½	—		Sandsteen, kleiig, grys.
Shale, sandy, grey	1	3	—		Skalie, sanderig, grys.
Shale, sandy..............		11	—		Skalie, sanderig.
Shale, carbonaceous........		3	—		Skalie, koolstofhoudend.
Shale, sandy, greyish black, ferruginous towards bottom	1	6	—		Skalie, sanderig, grysswart, ysterhoudend na onder.
Sandstone, medium-grained, white, feldspathic	2	9	239	0	Sandsteen, middelkorrelrig, wit, veldspaties.
Sandstone, shaly, grey with two bands of clay shale at bottom	3	1	—		Sandsteen, skalieagtig, grys, met twee kleiskalielagies onder.
Sandstone, medium-grained, white, feldspathic		9	—		Sandsteen, middelkorrelrig, wit, veldspaties.
Mudstone, sandy, grey and purplish, with thin sandstone bands	3	9	—		Moddersteen, sanderig, grys en perserig, met dun sandsteenstrepe.
Sandstone, clayey, greyish white, with coarser white and purplish parts	1	8	248	4	Sandsteen, kleiig gryswit, met growwe wit en perserige dele
Sandstone, clayey, greyish white with coarser white and purplish parts	1	0	—		Sandsteen, kleiig, gryswit, met growwer wit en perserige dele.
Mudstone, sandy, dull purple	2	0	—		Moddersteen, sanderig, dofpers.
Sandstone, clayey, brown to purple	1	1	—		Sandsteen, kleiig, bruin tot pers.
Shale, sandy, brown........	1	0	—		Skalie, sanderig, bruin.
Sandstone, greenish grey and brown clayey	2	10	256	2	Sandsteen, groengrys en bruin, kleiig.
Sandstone, coarse with conglomerate	12	10	269	0	Sandsteen, grof, met konglomeraat.
N.B.—2′ subtracted from original record to fit in with F.R.I.					**L.W.**—2′ afgetrek van oorspronklike staat om in te pas met B.N.I.

F.R.I. Sample No. No. van monster B.-N.-I.	Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.	Aard van lae.
		In. *Dm.*	*Ft. In.* *Vt. Dm.*	
M 32	**Roof :** black shale....	—	142 3	**Dak :** Swart skalie.
	Carbonaceous shale, shale, **N.S.**	½	—	Koolstofhoudende skalie, **N.G.**
	Bright **coal,** pyritic at top	10½	—	**Glanskool,** pirities bo-aan.
	Carbonaceous shale with very fine bright bands of **coal, N.S.**	2	—	Koolstofhoudende skalie met baie dun glansende **steenkoolbande, N.G.**
	Floor : Carbonaceous shale	—	143 4	**Vloer :** Koolstofhoudende skalie.
M 33	**Roof :** Carbonaceous shale	—	148 8	**Dak :** Koolstofhoudende skalie.
B	Very bright **coal** with bands of bright **coal** and shale in centre	18	—	**Steenkool,** baie glansend met bande **glanskool** en skalie in die middel.
	Carbonaceous shale, **N.S.**	7	—	Koolstofhoudende skalie, **N.G.**
A	Very bright **coal,** mainly gas-like	31	—	**Steenkool,** baie glansend, hoofsaaklik gassteenkoolagtig.
	Floor : Carbonaceous shale	—	153 4	**Vloer :** Koolstofhoudende skalie.
M 34	**Roof :** Carbonaceous shale	—	157 9	**Dak :** Koolstofhoudende skalie.
	Bright pyritic **coal** with few thin shale bands	7	—	Glansende piritiese **steenkool** met 'n paar dun skaliebande.
	Floor : shale.........	—	158 4	**Vloer :** Skalie.
M 35	**Roof :** Carbonaceous shale	—	168 0	**Dak :** Koolstofhoudende skalie.
F	Mainly dull **coal** with many slip planes : weathered appearance	46	—	Hoofsaaklik dowwe **steenkool** met volop glyvlakke : verweerde voorkome.
	Grey shale, **N.S.**......	8	—	Grys skalie, **N.G.**
E	Bright **coal**...........	18	—	**Glanskool.**
D	Mixed, mainly dull, pyritic **coal**	20	—	Gemeng, hoofsaaklik dowwe piritiese **steenkool.**
C	Mainly dull **coal** with shale partings	10	—	Hoofsaaklik dowwe **steenkool** met skalieskeidings
B	Mainly bright **coal,** with occasional shale partings, pyritic	16	—	Hoofsaaklik **glanskool** met enkele skalieskeidings, pirities.
A2	Bright **coal,** very bright at bottom	12	—	**Glanskool,** baie glansend onderaan.
A1	Very bright **coal**......	26	—	**Steenkool,** baie glansend.
	Floor : Shale with **coal** bands	—	181 0	**Vloer :** Skalie met **steenkoolbande.**

BOREHOLE 17: GREENWICH 1005: BOORGAT 17

(2) PROXIMATE ANALYSES—(2) KORTANALISES

F.R.I. Sample Number. Nommer van monster B.-N.-I.	Width ins. Wydte dm.	Cal. Val. lbs./lb. Vw. lbs./lb.	Percentage H_2O. Persentasie H_2O.	Percentage Ash. Persentasie as.	Percentage Vol. Matter. Persentasie vlugbestand.	Percentage fixed Carbon. Persentasie kookskoolstof.	Percentage Fl. 1·45. Persentasie dryfsel 1·45.	Percentage Ash, Fl. 1·45. Persentasie as, dryfsel 1·45.	Percentage Fl. 1·6. Persentasie dryfsel 1·6.	Percentage Ash, Fl. 1·6. Persentasie as, dryfsel 1·6.	Sw. No., Fl. 1·45. Sw.-Syf., dryfsel. 1·45.	Sw. No., Fl. 1·6. Sw.-Syf., dryfsel. 1·6.
M 32	10½	—	2·6	35·0	[illegible]6·3	36·1	32·5	5·9	46·0	10·8	·1 p	—
M 33 B	18	—	2·6	29·3	26·9	41·2	39·2	6·1	59·5	13·4	1 p	—
A	31	11·3	2·7	19·0	32·1	46·2	64·6	7·7	80·9	11·7	1½	1 p
M 34	7	10·95	2·4	20·3	31·6	45·7	64·0	4·4	72·8	7·2	2½	2½
M 35 F	46	—	1·8	36·1	25·3	36·8	28·0	7·7	44·3	12·1	1½	1½
E	18	—	1·7	29·2	28·8	40·3	39·6	7·5	58·0	12·7	2½	2
D	20	—	1·6	38·2	25·2	35·0	23·8	6·5	42·3	12·6	1	1 p
C	10	—	1·6	50·1	20·5	27·8	—	—	—	—	—	—
B	16	—	1·8	38·7	25·1	34·4	21·4	8·2	43·5	14·2	2	1½
A2	12	10·79	1·8	23·4	31·8	43·0	60·2	6·2	69·5	8·5	4	3½
A1	26	11·46	2·1	18·5	34·3	45·1	71·2	7·2	80·0	9·2	3½	3½

BOREHOLE 18 : FAIRFIELD 394 : BOORGAT 18

Core ⅞ in. Kern ⅞ dm.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. *Vt.*	*In.* *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
Soil	1	0	1	0	Grond.
Limestone, surface	4	0	5	0	Kalksteen, oppervlakte.
Limestone, sandy, with fragments of mudstone	5	0	10	0	Kalksteen, sanderig, met stukkies moddersteen.
Mudstone, dark red, with hard yellow ferruginous parts	17	0	27	0	Moddersteen donkerrooi met harde geel, ysterhoudende deeltjies.
Mudstone, top 10′ red, then grey and red patches, more grey towards bottom, some hard cherty parts	20	0	47	0	Moddersteen, boonste 10′ rooi, dan grys en rooi gevlek, gryser na onder, enkele harde chertagtige dele.
Mudstone, grey with some red patches	16	0	67	0	Moddersteen, grys met enkele rooi vlekke.
Mudstone, grey	1	0	—		Moddersteen, grys.
Sand and clay	19	0	87	0	Sand en klei.
Coal, bright, predominant with dull parts and four shale bands from 1″ to 3″ thick	14	0	101	0	**Steenkool,** oorwegend glansend met dowwe deeltjies en vier skalielagies van 1″ tot 3″ dik.
Shale, black	2	0	103	0	Skalie, swart.
Coal		2	103	2	**Steenkool.**
Shale, black		5	103	7	Skalie, swart.
Coal		2	103	9	**Steenkool.**
Shale, carbonaceous, bright **coal** bands and some **coal** bands ± 2″ thick	19	11	—		Skalie, swart, koolstofhoudend, met strepies **glanskool** en enkele lagies **steenkool** van ± 2″ dik.
Clay shale, greyish brown	1	3	127	0	Kleiskalie, grysagtig-bruin.
Clay shale, grey and brownish, grey with sandy parts and three bands of coarse feldspathic sandstone ± 3″ thick	3	8	—		Kleiskalie, grys en bruingrys met sanderige dele en drie lagies growwe veldspatiese sandsteen ± 3″ dik.
Sandstone, feldspathic, medium-grained and coarse with much pyrites and shaly bands	3	1	—		Sandsteen, veldspaties, middelkorrelrig en grof met baie piriet en skalieagtige lagies.
Shale, grey and brownish grey with sandy parts	2	8	137	0	Skalie, grys en bruinagtig-grys met sanderige dele.
Shale, grey and brownish grey with sandstone bands 1″ to 6″ thick	7	3	—		Skalie, grys en bruinagtig-grys met sandsteenlagies 1″ tot 6″ dik.
Shale, coaly, brittle	2	10	147	10	Skalie, steenkoolagtig, bros.
Shale, carbonaceous with sandy parts	1	9	—		Skalie, koolstofhoudend met sanderige deeltjies.
Shale, blackish grey and brownish grey with some quartz grains	2	4	—		Skalie, swartgrys en bruingrys met enkele kwartskorrels.
Sandstone, coarse-grained, greyish white, feldspathic, abundant pyrites; and fine brownish grey clay-bearing sandstone	1	6	153	6	Sandsteen, grofkorrelrig, grysagtig-wit, veldspaties, vol piriet; en fyn bruinagtig-grys kleihoudende sandsteen.
Sandstone, medium-grained, clay-bearing	2	6	—		Sandsteen, middelkorrelrig, kleihoudend.
Sandstone, white, coarse-grained, feldspathic, with grit and conglomerate; the latter 3″ thick	7	9	167	0	Sandsteen, wit, grofkorrelrig, veldspaties, met grintsteen en konglomeraat; laasgenoemde 3″ dik.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard vanlae.
	Ft. *Vt.*	*In.* *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
Grit and sandstone, white, coarse-grained, feldspathic	1	4	—		Grintsteen en sandsteen, wit, grofkorrelrig, veldspaties.
Sandstone, clay-bearing, brownish grey and blackish grey	1	6	—		Sandsteen, kleihoudend, bruinagtig-grys en swart-grys.
Shale, carbonaceous, slightly sandy		3	—		Skalie, koolstofhoudend, effens sanderig.
Sandstone, grey, clay-bearing, fine and coarse	1	0	—		Sandsteen, grys, kleihoudend, fyn en grof.
Sandstone, medium-grained, feldspathic, with fine clay-bearing parts		9	—		Sandsteen, middelkorrelrig, veldspaties met fyn kleihoudende deeltjies.
Shale, bluish grey and brownish grey, sandy	6	1½	—		Skalie, blou en bruingrys, sanderig.
Sandstone, brownish grey, clay-bearing	3	9	—		Sandsteen, bruin-grys, kleihoudend.
Sandstone, whitish grey, clay-bearing, medium-grained, abundant pyrites	1	1	—		Sandsteen, wit, kleihoudend, middelkorrelrig, vol piriet.
Sandstone, clay-bearing, brownish grey and blackish grey	3	1	187	0	Sandsteen, kleihoudend, bruin en swartgrys.
Sandstone, brownish grey carbonaceous	2	4	—		Sandsteen, bruin-grys, kleihoudend.
Shale, blackish grey, carbonaceous in parts and sandy in others	1	9	—		Skalie, swart-grys, deels koolstofhoudend, deels sanderig.
Sandstone, grey, clay-bearing, lower part shaly and carbonaceous	5	0	197	0	Sandsteen, grys, kleihoudend, onderdeel is skalieagtig en koolstofhoudend.
Sandstone, carbonaceous, grey, shaly	1	6	—		Sandsteen, koolstofhoudend, grys, skalieagtig.
Sandstone, whitish grey, medium-grained, feldpathic, with fine black carbonaceous bands	1	10	—		Sandsteen, witgrys, middelkorrelrig, veldspaties, met fyn, swart, koolstofhoudende strepe.
Shale, greyish black, carbonaceous slightly sandy, micaceous	1	0	—		Skalie, grysswart, koolstofhoudend, effens sanderig en vol glimmer.
Sandstone, greyish black, carbonaceous, shaly	1	5	—		Sandsteen, grysswart, koolstofhoudend, skalieagtig.
Shale, coaly, with 1″ **coal** at top		5	—		Skalie, steenkoolagtig, met 1″ **steenkool** bo-aan.
Shale, carbonaceous, sandy	1	8	—		Skalie, koolstofhoudend, sanderig.
Shale, brownish grey, sandy	7	0	212	6	Skalie, bruinagtig-grys, sanderig.
Sandstone, clayey, grey, fine	1	8	—		Sandsteen, kleihoudend, grys, fyn.
Sandstone, feldspathic, white, medium-grained, with lenses of greenish grey mudstone	5	9	—		Sandsteen, veldspaties, wit, middelkorrelrig met lensies groenagtig-grys moddersteen.
Arkose with mudstone lenses	9	3	—		Arkose met lensies moddersteen
Granite, weathered, white, with a thin quartz vein		9	237	0	Graniet, verweer, wit, met 'n dun kwartsaartjie.
Granite, white and greenish white with some pink parts, gneissic and weathered to some extent	76	10	327	0	Graniet, wit en groenerig-wit met ligrooi dele, gneisagtig en in 'n mate verweer.
Amphibole schist, green with pink gneissic granite veins; the schist is very brittle, well jointed and slickensided	50	0	412	0	Amfibool-schist, groen met ligrooi gneisagtige granietare; die schist is baie bros, vol nate met glyvlakke.

BOREHOLE 19 : WATERVAL 443 : BOORGAT 19

Core 3½ in. Kern 3½ dm.

Nature of Strata.		Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.	
		Ft. Vt.	*In. Dm.*	*Ft. Vt.*	*In. Dm.*		
Soil..............	Jumper drill used.	13	0	—		Grond............	Met stamp-boor geboor.
Red-beds.........		160	0	173	0	Rooi-lae..........	
Sandstone, coarse, medium-grained, fine		45	0	218	0	Sandsteen, grof, middelkorrelrig, fyn.	
Mudstone, grey....		9	0	227	0	Moddersteen, grys.	
Mudstone, grey, dull, green, calcite along joints and pyrites occasionally		5	0	232	0	Moddersteen, grys en dof groen, kalsiet op nate en piriet hier en daar.	
Mudstone, dull green with red and brown patches here and there. Lower 6′ is mostly chocolate brown abundant calcite everywhere along joints		19	0	251	0	Moddersteen, dofgroen met rooi en bruin vlekke hier en daar. Onderste 6′ is meesal sjokolade-bruin. Oral baie kalsiet op nate.	
Mudstone, chocolate brown with dull green and grey patches, many thin carbonate layers. At 263′ there is 6′ calcareous hard shale with abundant pyrites		20	2	271	2	Moddersteen, sjokoladebruin met dofgroen en grys vlekke, oral karbonaatlagies. Op 263′ is 6′ kalkhoudende harde skalie, vol piriet.	
Mudstone, grey with some purplish brown patches, a few layers are hard, finely laminated shale with abundant calcite and pyrites		8	5	—		Moddersteen, grys met enkele persbruin vlekke; lagies is harde fyngelaagde skalie, vol kalsiet en piriet.	
Mudstone, with layers blackish grey carbonaceous shale		6	6	—		Moddersteen, grys, met lagies swartgrys koolstofhoudende skalie.	
Shale, carbonaceous, much pyrites		1	8	—		Skalie, koolstofhoudend, baie piriet.	
Bright **coal** with shale bands			6	—		**Glanskool** met skaliestrepe.	
Shale, carbonaceous, with much pyrites			4	—		Skalie, koolstofhoudend met baie piriet.	
Bright **coal** with shale bands			5	—		**Glanskool** met skaliestrepe.	
Shale, carbonaceous........			4	—		Skalie, koolstofhoudend.	
Bright **coal** and shale.......			11	—		**Glanskool** en skalie.	
Shale, carbonaceous........			3	—		Skalie, koolstofhoudend.	
Bright **coal,** dull **coal** and shale		1	2	291	8	**Glanskool,** dowwe **steenkool** en skalie.	
Shale, carbonaceous........			6	—		Skalie, koolstofhoudend.	
Bright **coal**................			2½	—		**Glanskool.**	
Shale, carbonaceous........		1	1½	293	7	Skalie, koolstofhoudend.	
Coal, very bright, pitch-like conchoidal fracture, with woody ring		3	5	297	0	**Steenkool,** baie glansend, pikagtig, skulpvormige breuk, met 'n houtagtige klank.	
Shale, **N.S.**................		0	4	297	4	Skalie, **N.G.**	
Coal, very bright. Similar to coal above shale		0	4	297	8	**Steenkool,** baie glansend. Soortgelyk aan steenkool bokant skalie.	
Shale, carbonaceous, and in parts greyish black clay shale		4	6	302	2	Skalie, koolstofhoudend, en dele vaalswart kleiskalie.	
Shale and dull **coal** with bright bands of **coal**			10	303	0	Skalie en dowwe **steenkool** met glansende strepies **steenkool.**	
Coal, mainly very bright, with some very broad vitrain bands, and some thin shale bands mixed with bright **coal**		3	0	306	0	**Steenkool,** hoofsaaklik baie glansend, met enkele baie breë vitrietbande, en enkele dun skaliebande gemeng met **glanskool.**	

Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.	Aard van lae.
	Ft. In. *Vt. Dm.*	*Ft. In.* *Vt. Dm.*	
Shale, **N.S.**	0 5	306 5	Skalie, **N.G.**
Shale, black	10	312 3	Skalie, swart.
Bright banded **coal,** shaly in parts	7	312 10	**Streepglanskool,** skalieagtig in dele.
Shale, **N.S.**	5	313 3	Skalie, **N.G.**
Coal, predominantly bright, pyritic	10	314 1	**Steenkool,** oorwegend glansend, piriethoudend.
Shale, black, **N.S.**	1 10	315 11	Skalie, swart, **N.G.**
Coal, N.S.	3	316 2	**Steenkool, N.G.**
Shale, black, **N.S.**	1 3	317 5	Skalie, swart, **N.G.**
Bright-banded **coal,** abundant pyrites and calcite	5	317 10	**Streepglanskool,** vol piriet en kalsiet.
Shale, black, **N.S.**	2	318 0	Skalie, swart, **N.G.**
Bright-banded **coal** with white stains	7	318 7	**Streepglanskool** met wit vlekke.
Shale, black, **N.S.**	7	319 2	Skalie, swart, **N.G.**
Coal, alternating bands of dull **coal** and mixed **coal**	1 2	320 4	**Steenkool,** afwisselende lagies dowwe **steenkool** en gemengde **steenkool.**
Shale, black, **N.S.**	3	320 7	Skalie, swart, **N.G.**
Coal, bright, granular	5	321 0	**Steenkool,** glansend, korrelrig.
Shale	1 8	322 8	Skalie.
Bright-banded **coal**	10	—	**Streepglanskool.**
Shale, carbonaceous, **N.S.**	2	—	Skalie, koolstofhoudend, **N.G.**
Bright-banded **coal**	5	—	**Streepglanskool.**
Shale, carbonaceous, **N.S.**	1	—	Skalie, koolstofhoudeud, **N.G.**
Bright-banded **coal**	1 3	325 5	**Streepglanskool.**
Shale	2 9	328 2	Skalie.
Coal, mixed	10	—	**Steenkool,** gemeng.
Coal, shaly, **N.S.**	6	—	**Steenkool,** skalieagtig, **N.G.**
Coal, mixed, **N.S.**	2	—	**Steenkool,** gemeng, **N.G.**
Shale, carbonaceous, **N.S.**	2	—	Skalie, koolstofhoudend, **N.G.**
Coal, mixed, heavy abundant pyrites	11	330 9	**Steenkool,** gemeng, swaar, vol piriet.
Shale, carbonaceous	7	—	Skalie, koolstofhoudend.
Coal, mixed, inferior	10	332 2	**Steenkool,** gemeng, minderwaardig.
Shale, carbonaceous	7	—	Skalie, koolstofhoudend.
Coal, mixed, predominantly bright with 2″ shale 2″ from bottom discarded	2 1	—	**Steenkool,** gemeng, oorwegend glansend met 2″ skalie 2″ van onder uitgesluit.
Shale, carbonaceous, **N.S.**	3	—	Skalie, koolstofhoudend, **N.G.**
Coal, heavy, pyritic, bright-banded	3	—	**Steenkool,** swaar, piriethoudend, gelaagd, glansend.
Shale, carbonaceous, **N.S.**	5	—	Skalie, koolstofhoudend, **N.G.**
Coal, very bright	7	336 4	**Steenkool,** baie glansend.
Shale	1 4	337 8	Skalie.
Coal, pyritic, very bright with broad pitchlike bands	2 8	—	**Steenkool,** piriethoudend, baie glansend met breë pikagtige strepe.
Shale, dull, heavy, **N.S.**	2	—	Skalie, dof, swaar, **N.G.**
Shale, black, **N.S.**	10	—	Skalie, swart, **N.G.**
Coal and shale bands, **N.S.**	2 11	344 3	**Steenkool-** en skalielagies, **N.G.**
Shale, carbonaceous, with **coal** and calcite bands	1 3	—	Skalie, koolstofhoudend, met strepies **steenkool** en kalsiet.
Shale, greyish black, abundant calcite grains	3	—	Skalie, vaalswart, vol kalsietkorreltjies.
Shale, carbonaceous	1 0	346 9	Skalie, koolstofhoudend.
Coal, very bright mixed, thinly banded, heavy	1 8	—	**Steenkool,** baie glansend gemeng, dungestreep, swaar.
Shale, carbonaceous	4	348 9	Skalie, koolstofhoudend.
Shale, carbonaceous, with **coal** bands	7 8	—	Skalie, koolstofhoudend, met strepies **steenkool.**
Coal	7	—	**Steenkool.**

Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.	Aard van lae.
	Ft. In. *Vt. Dm.*	*Ft. In.* *Vt. Dm.*	
Shale, carbonaceous........	3 5	—	Skalie, koolstofhoudend.
Coal, with shale bands....	6	—	**Steenkool,** met skaliestrepies
Shale, carbonaceous........	6	361 6	Skalie, koolstofhoudend.
Coal....................	2	—	**Steenkool.**
Shale, carbonaceous........	4 4	—	Skalie, koolstofhoudend.
Coal....................	3	—	**Steenkool.**
Shale, carbonaceous, with abundant calcite grains	4 7	370 10	Skalie, koolstofhoudend, me baie kalsietkorrels.
Bright **coal,** dull **coal** and shale with much pyrites	1 0	—	**Glanskool** dowwe **steenkool** e skalie met baie piriet.
Shale, carbonaceous, with bright **coal** bands	1 10	—	Skalie, koolstofhoudend, me strepies **glanskool.**
Sandstone, grey, clayey shaly	6 3	380 0	Sandsteen, grys, kleierig, skalie agtig.
Sandstone, grey clayey, shaly	4	—	Sandsteen, grys, kleierig, skalie agtig.
Granite, coarse-grained, light coloured, weathered, much pyrites	22 0	406 0	Graniet, grofkorrelrig, lig kleurig, verweerd, met bai piriet.
Granite, gneissic, coarse-grained, light-coloured, weathered	40 0	446 0	Graniet, gneisagtig, grofkorrel rig, ligkleurig, verweerd.
Granite. (Core left in hole)	6 0	452 0	Graniet. (Kern in gat gebly)

BOREHOLE 19 : WATERVAL 443 : BOORGAT 19

F.R.I. Sample No. No. van monster B.-N.-I.	Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.	Aard van lae.
		In. *Dm.*	*Ft. In.* *Vt. Dm.*	
M 63	**Roof : Coal** and shale bands	—	293 7	**Dak : Steenkool-** e skaliebande.
	Very bright pitch-like **coal,** conchoidal fracture, has a woody ring when struck	41	—	**Steenkool,** baie glansend pikagtig, skulp vormige breuk, het houtagtige klan onder 'n slag.
	Shale, **N.S.**..........	4	—	Skalie, **N.G.**
	Very bright **coal,** similar to **coal** above shale	4	—	**Steenkool,** baie glansen soortgelyk aan **steen kool** bokant skalie.
	Floor : Black Shale...	—	297 8	**Vloer :** Swart skalie.
M 64	**Roof :** Black shale....	—	303 0	**Dak :** Swart skalie.
	Mainly very bright **coal** (with some very broad vitrain bands) pitch-like, and some thin bands of shale mixed with bright **coal**	36	—	Oorwegend baie glan sende **steenkool** (me enkele baie breë vit rietbande) pikagtig e enkele dun skalie bande met **glans kool** gemeng.
	Shale, **N.S.**...........	5	—	Skalie, **N.G.**
	Floor : Black shale ...	—	306 5	**Vloer :** Swart skalie.

F.R.I. Sample No. No. van monster B.-N.-I.	Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.	Aard van lae.
		In. *Dm.*	*Ft. In.* *Vt. Dm.*	
M 65	**Roof :** Black shale....	—	312 3	**Dak :** Swart skalie.
F	Bright-banded **coal,** shaly in parts	7	—	**Streepglanskool,** plek-plek skalieagtig.
	Shale, **N.S.**............	5	—	Skalie, **N.G.**
E	Mainly bright pyritic **coal**	10	—	Glansende pirities **steenkool.** oorwegend.
	Black shale, **N.S.**... ...	22	—	Swart skalie, **N.G.**
	Coal, N.S.............	3	—	**Steenkool, N.G.**
	Black shale, **N.S.**... ...	15	—	Swart skalie, **N.G.**
D	Bright-banded **coal** with pyrites and calcite	5	—	**Streepglanskool** met piriet en kalsiet.
	Black shale, **N.S.**... ...	2	—	Swart skalie, **N.G.**
C	Bright-banded **coal** with white stains	7	—	**Streepglanskool** met wit vlekke.
	Black shale, **N.S.**... ...	7	—	Swart skalie, **N.G.**
B	Alternating bands of mixed and dull **coal**	14	—	Bande gemengde en dowwe **steenkool** beurtelings.
	Black shale, **N.S.**... ...	3	—	Swart skalie, **N.G.**
A	Bright granular **coal**...	5	—	Glansende, korrelrige **steenkool.**
	Floor : Black shale ...	—	321 0	**Vloer :** Swart skalie.
M 66	**Roof :** Black shale....	—	322 8	**Dak :** Swart skalie.
	Bright-banded **coal**....	10	—	**Streepglanskool.**
	Carbonaceous shale, **N.S.**	2	—	Koolstofhoudende skalie, **N.G.**
	Bright banded **coal**....	5	—	**Streepglanskool.**
	Carbonaceous shale, **N.S.**	1	—	Koolstofhoudende skalie, **N.G.**
	Bright-banded **coal**....	15	—	**Streepglanskool.**
	Floor : Black shale ...	—	325 5	**Vloer :** Swart skalie.
M 67	**Roof :** Black shale....	—	328 2	**Dak :** Swart skalie.
E	Mixed **coal**............	10	—	Gemengde **steenkool.**
	Stony **coal, N.S.**......	6	—	Klipperige **steenkool, N.G.**
	Mixed **coal, N.S.**......	2	—	Gemengde **steenkool, N.G.**
	Carbonaceous shale, **N.S.**	2	—	Koolstofhoudende skalie, **N.G.**
D	Mixed heavy, pyritic **coal**	11	—	Gemengde swaar, piritiese **steenkool.**
	Carbonaceous shale, **N.S.**	7	—	Koolstofhoudende skalie, **N.G.**
C	Mixed inferior **coal**....	10	—	Gemengde, minderwaardige **steenkool.**
	Carbonaceous shale, **N.S.**	7	—	Koolstofhoudende skalie, **N.G.**
B	Mixed, mainly bright **coal** with 2" shale 2" from bottom excluded	25	—	Oorwegend **glanskool** met 2" skalie, 2" van onder, uitgesluit.
	Carbonaceous shale, **N.S.**	3	—	Koolstofhoudende skalie, **N.G.**
	Bright-banded heavy pyritic **coal, N.S.**	3	—	Swaar **streepglanskool,** pirities, **N.G.**
	Carbonaceous shale, **N.S.**	5	—	Koolstofhoudende skalie, **N.G.**
A	Very bright **coal**......	—	—	**Steenkool,** baie glansend.
	Floor : Black shale ...	—	336 4	**Vloer :** Swart skalie.

F.R.I. Sample No. No. van monster B.-N.-I.	Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.	Aard van lae.
		In. *Dm.*	*Ft. In.* *Vt. Dm.*	
M 68	**Roof :** Black shale....	—	337 8	**Dak :** Swart skalie.
	Very bright pyritic **coal** with broad pitch-like bands	32	—	Piritiese **steenkool,** bai glansend met bre pikagtige bande.
	Dull heavy shale, **N.S.**	2	—	Dowwe, swaar skali **N.G.**
	Black shale, **N.S.**... ...	10	—	Swart skalie, **N.G.**
	Coal and shale bands, **N.S.**	35	—	**Steenkool-** en skalie bande, **N.G.**
	Floor : Black shale ...	—	344 3	**Vloer :** Swart skalie.
M 69	**Roof :** Black shale....	—	346 9	**Dak :** Swart skalie.
	Mixed very bright **coal** (finely-banded, heavy)	20	—	Gemengde, baie glan sende **steenkool** (fyn gestreep, swaar).
	Carbonaceous shale, **N.S.**	4	—	Koolstofhoudende skalie, **N.G.**
	Floor : Black shale ...	—	348 9	**Vloer :** Swart skalie.

BOREHOLE 19: WATERVAL 443: BOORGAT 19

(2) PROXIMATE ANALYSES—(2) KORTANALISES

F.R.I. Sample Number. Nommer van monster B.-N.-I.	Width ins. Wydte dm.	Cal. Val. lbs./lb. Vw. lbs./lb.	Percentage H_2O. Persentasie H_2O.	Percentage Ash. Persentasie as.	Percentage Vol. Matter. Persentasie vlug. bestand.	Percentage fixed Carbon. Persentasie kookskoolstof.	Percentage Fl. 1·45. Persentasie dryfsel 1·45.	Percentage Ash, Fl. 1·45. Persentasie as, dryfsel 1·45.	Percentage Fl. 1·6. Persentasie dryfsel 1·6.	Percentage Ash, Fl. 1·6. Persentasie as, dryfsel 1·6.	Sw. No., Fl. 1·45. Sw.-Syf., dryfsel 1·45.	Sw. No., Fl. 1·6. Sw.-Syf., dryfsel 1·6.
M 63	45	10·2	3·1	26·3	29·3	41·3	43·2	7·7	64·6	11·8	1 f	1 f
M 64	36	10·2	2·9	27·7	29·0	40·4	49·6	9·0	68·0	13·4	1½	1
M 65 F	7	—	2·7	35·2	25·6	36·5	27·9	8·0	45·7	15·2	1	1 f
E	10	11·6	3·1	18·6	32·0	46·3	69·2	7·5	81·1	10·2	1	1
D	5	—	2·5	33·5	27·7	36·3	34·6	6·0	47·9	10·4	1	1
C	7	11·2	2·9	18·4	31·6	47·1	66·0	6·8	79·4	10·2	1 f	1 f
B	14	9·8	2·9	27·0	28·7	41·4	52·6	6·6	64·8	9·5	1½	1
A	5	11·4	2·9	19·1	31·3	46·7	66·2	8·8	80·7	11·2	1	1
M 66	30	—	2·4	31·6	27·0	39·0	37·0	7·6	52·5	13·9	1	1
M 67 E	10	—	2·5	29·8	28·0	39·7	44·8	7·6	56·6	10·7	2	1
D	11	—	2·2	40·9	23·7	33·2	27·0	7·7	—	—	1	—
C	10	—	2·2	40·4	24·5	32·9	27·3	8·4	—	—	1	—
B	23	—	2·3	37·6	24·6	45·5	32·2	7·9	—	—	1	—
A	7	—	2·6	24·9	29·1	43·4	52·3	8·5	71·5	11·9	1	1
M 68	32	10·5	2·7	24·8	29·3	43·2	25·7	7·1	67·5	10·2	1½	1
M 69	20	—	2·3	30·8	28·3	38·6	33·9	8·0	54·6	13·3	1	1

BOREHOLE 20 : MAKKILLAKA 868 : BOORGAT 20

Core 3½ in. Kern 3½ dm.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. *Vt.*	*In.* *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
Soil	11	0	11	0	Grond.
Sandstone, fine, pink	2	4	15	0	Sandsteen, fyn, ligrooi.
Sandstone, fine, pink, occasionally cross-bedded	22	4	37	6	Sandsteen, fyn, ligrooi, hier en daar kruisgelaag.
Sandstone, fine, pink	50	11	97	0	Sandsteen, fyn, ligrooi.
Sandstone, fine, pink with white portions	20	0	117	0	Sandsteen, fyn, ligrooi met wit dele.
Sandstone, fine, pink, dark red and friable in parts	20	0	137	0	Sandsteen, fyn, ligrooi, dele is donkerrooi en bros.
Sandstone, fine, pink, cross-bedding at 160′–170′	39	0	177	0	Sandsteen, fyn, ligrooi, kruisgelaagheid by 160′–170′.
Sandstone, fine, pink, and white with red bands; with one limestone nodule	18	0	197	0	Sandsteen, fyn, ligrooi en wit met rooi strepe; met een kalkknol.
Sandstone, fine, white and slightly reddish with red patches and specks	15	0	217	0	Sandsteen, fyn, wit en effens rooierig met rooi vlekke en spikkels.
Sandstone, fine, pink and white, well bedded in parts	29	0	246	0	Sandsteen, fyn ligrooi en wit, goed gelaagd in dele.
Sandstone, fine, pink	39	9	287	0	Sandsteen, fyn, ligrooi.
Sandstone, fine pink, white and slightly reddish	15	9	—		Sandsteen, fyn, wit en effens rooierig.
Sandstone, very fine, clayey purplish brown with white calcareous specks	4	3	307	0	Sandsteen, baie fyn, kleiig, persbruin met wit kalkhoudende deeltjies.
Sandstone, very fine, clayey, purplish brown with white calcareous specks	14	0	—		Sandsteen, baie fyn, kleiig, persbruin met wit kalkhoudende deeltjies.
Sandstone, very fine, clayey, brownish red with whitish green calcareous specks	5	2	327	0	Sandsteen, baie fyn, kleiig, bruinrooi met wit groen kalkhoudende deeltjies.
Sandstone, very fine, clayey, brownish red with whitish green calcerous specks	10	0	-		Sandsteen, baie fyn, kleiig, bruinrooi met wit groen kalkhoudende deeltjies.
Sandstone, very fine, clayey, purplish brown with white calcareous specks	10	0	347	0	Sandsteen, baie fyn, kleiig, persbruin met wit kalkhoudende deeltjies.
Sandstone, very fine, clayey, purplish brown with white calcareous specks and white sandstone	50	0	397	0	Sandsteen, baie fyn, kleiig, persbruin met wit kalkhoudende dele en wit sandsteen.
Sandstone, very fine, clayey, white brown and purplish brown, with white calcareous specks	40	0	437	0	Sandsteen, baie fyn, kleiig, wit, bruin en persbruin, met wit kalkhoudende deeltjies.
Sandstone, very fine, clayey, white with brown patches	2	0	—		Sandsteen, baie fyn, kleiig, wit met bruin vlekke.
Sandstone, very fine, clayey, reddish brown with greenish white calcareous parts and purplish brown parts	18	0	457	0	Sandsteen, baie fyn, kleiig, rooibruin met groenwit kalkhoudende dele en persbruin dele.
Sandstone, very fine, clayey, reddish and purplish brown with many greenish white calcareous specks and dark red clay lenses	20	0	477	0	Sandsteen, baie fyn, kleiig, rooibruin en persbruin met baie groenwit kalkhoudende deeltjies en donkerrooi kleilensies.
Sandstone, very fine, clayey, reddish brown with small white calcareous patches	20	0	497	0	Sandsteen, baie fyn, kleiig, rooibruin met klein wit kalkhoudende kolletjies.

Nature of Strata.	Thickness Recovered. Dikte verkry.	True Depth. Ware diepte.	Aard van lae.
	Ft. In. *Vt. Dm.*	*Ft. In.* *Vt. Dm.*	
Sandstone, very fine, clayey, reddish brown with some white calcareous specks	13 6	—	Sandsteen, baie fyn, kleiig, rooibruin met enkele wit kalkhoudende spikkels.
Sandstone, very fine, clayey, white and slightly brown in places	6 6	517 0	Sandsteen, baie fyn, kleiig, wit en effens bruin op plekke.
Sandstone, very fine, clayey, white with brown patches	10 7	—	Sandsteen, baie fyn, kleiig, wit met bruin vlekke.
Sandstone, very fine, clayey, white and brown patches of calcareous nodules	6 4	—	Sandsteen, baie fyn, kleiig, wit en bruin gevlek met kalkknolle.
Sandstone, very fine, clayey, reddish brown with some large greenish white calcareous nodules	3 1	537 0	Sandsteen, baie fyn, kleiig, rooibruin met enkele groot groenwit kalkhoudende knolle.
Sandstone, very fine, clayey, reddish brown with greenish white calcareous spots and dark red clay lenses	20 0	557 0	Sandsteen, baie fyn, kleiig, rooibruin met groenwit kalkhoudende deeltjies en donkerrooi kleilensies.
Sandstone, very fine, clayey, reddish brown and light purplish brown with white calcareous specks	13 7	—	Sandsteen, baie fyn, kleiig, rooibruin en ligte persbruin met wit kalkhoudende spikkels.
Sandstone, very fine, clayey, white with bluish green mud lenses	6 5	577 0	Sandsteen, baie fyn, kleiig, wit met blougroen modderlensies.
Sandstone, very fine, clayey, white with bluish green mud lenses	4 0	-	Sandsteen, baie fyn, kleiig, wit met blougroen modderlensies.
Sandstone, very fine, clayey, reddish brown with greenish white calcareous spots	14 0	—	Sandsteen, baie fyn, kleiig. rooibruin met groenwit kalkhoudende deeltjies.
Sandstone, very fine, clayey, purplish brown with red mud lenses and some calcareous spots	22 0	617 0	Sandsteen, baie fyn, kleiig, persbruin met rooi modderlensies en enkele wit kalkhoudende kolletjies.
Sandstone, very fine, clayey, purplish brown at top and purple with white patches at bottom with many calcareous nodules	20 0	637 0	Sandsteen, baie fyn, kleiig, persbruin bo en pers met wit gevlek onder, met baie kalkknolle.
Sandstone, very fine, clayey, purple and white patches	15 0	—	Sandsteen, baie fyn, kleiig, pers en wit gevlek.
Sandstone, very fine, clayey, with occasional large quartz grains, white and purple patches, many calcareous nodules, well-bedded and shaly in parts	5 0	657 0	Sandsteen, baie fyn, kleiig, met enkele groot kwartskorrels, wit en pers gevlek, baie kalkknolle, dele is goedgelaagd en skalieagtig.
Sandstone, very fine, clayey, greenish white and purplish, thinly bedded in parts, banded and shaly. Some larger quartz grains and some coarser sandstone parts, with calcareous nodules	7 1	—	Sandsteen, baie fyn, kleiig, groenwit en persagtig, dele is dungelaagd, gestreep en skalieagtig. Enkele groter kwartskorrels daarin en enkele growwe sandsteendele, kalkhoudende knolle.
Mudstone, sandy with some large scattered quartz grains, chocolate brown, with calcareous nodules	10 2	—	Moddersteen, sanderig met enkele groter verspreide kwartskorrels sjokoladebruin met kalkknolle.

Nature of Strata.	Thickness Recovered. Dikte verkry.		True Depth. Ware diepte.		Aard van lae.
	Ft. *Vt.*	*In.* *Dm.*	*Ft.* *Vt.*	*In.* *Dm.*	
Sandstone, medium-grained, purplish brown	1	8	677	0	Sandsteen, middelkorrelrig, persbruin.
Sandstone, medium-grained with finer clayey parts, purplish brown and white patches, with pyrites	3	11	...		Sandsteen, middelkorrelrig met fyner kleihoudende deeltjies, persbruin en wit gevlek, met piriet.
Sandstone, medium-grained, white with purplish brown parts		9	—		Sandsteen, middelkorrelrig, wit met persbruin dele.
Shale, greyish blue, hard, abundant pyrites		3	—		Skalie, grysblou, hard, vol piriet.
Sandstone, medium-grained and coarse white, with some greenish white mud lenses	10	0	697	0	Sandsteen, middelkorrelrig, en grof, wit, met enkele groenwit modderlensies.
Sandstone, medium-grained and coarse, white	3	6	—		Sandsteen, middelkorrelrig, en grof wit.
Shale, greyish blue, hard, abundant pyrites		2	—		Skalie, grysblou, hard, vol piriet.
Sandstone, coarse to medium-grained white, with pyrites	5	1	717	0	Sandsteen, grof tot middelkorrelrig, wit met piriet.
Sandstone, coarse and grit; Much pyrites	1	9	726	10	Sandsteen, grof en grintsteen; baie piriet.
Mudstone, green, with much pyrites, some quartz grains in top ½"	1	2	—		Moddersteen, groen met baie piriet, enkele kwartskorrels in boonste ½".
Mudstone, chocolate brown, with some greenish patches and white carbonate nodules	19	0	747	0	Moddersteen, sjokoladebruin met enkele groenerige vlekke en wit karbonaatknolle.
Mudstone, chocolate brown, with some small white carbonate nodules	16	5	763	6	Moddersteen, sjokoladebruin met enkele klein wit karbonaatknolletjies.
Mudstone, chocolate brown, with some calcite bands	15	10	779	4	Moddersteen, sjokoladebruin met enkele kalsietstrepies.
Mudstone, chocolate brown, with some green and yellow patches	18	4	797	8	Moddersteen, sjokoladebruin met enkele groen en geel vlekke.
Mudstone, reddish brown and grey patches	10	3	—		Moddersteen, rooibruin en grys gevlek.
Mudstone, grey and blackish grey with reddish brown spots; some hard, pyrites and calcareous shale bands	11	5	—		Moddersteen, grys en swartvaal met rooibruin vlekkies, enkele harde piriet en kalkhoudende skalielagies.
Shale, black, carbonaceous..	9	1	828	8	Skalie, swart, koolstofhoudende
Coal......................	1	6	830	2	**Steenkool.**
Shale with **coal** bands......	2	3	832	5	Skalie met **steenkoolstrepe.**
Coal......................	4	7	837	0	**Steenkool.**
Shale......................	2	3	839	3	Skalie.
Coal......................		5	839	8	**Steenkool.**
Shale......................	1	5	841	1	Skalie.
Shale with **coal** bands.....	1	6	842	7	Skalie met **steenkoolstrepe.**
Coal......................	1	5	844	0	**Steenkool.**
Shale......................	1	2	845	2	Skalie.
Coal......................	1	4	847	6	**Steenkool.**
Shale with **coal** bands......	5	6	852	0	Skalie met **steenkoolstrepe.**

WATERBERGSE STEENKOOLVELD

STRATIGRAFIESE PROFIELE. BOORGATE 1-20

WATERBERG COALFIELD

COLUMNAR SECTIONS. BOREHOLES 1-20